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Social class differentials at the transition
from lower to upper secondary education
in France

School track choices, parental involvement and
grade retention

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1 Introduction

There is firm international evidence of social inequality in educational attainment. Even though in all economically advanced countries educational expansion has increased overall rates of educational attainment, students from higher social classes are still more likely to attain higher educational degrees than students from lower classes. Sociologists investigating *inequality in educational opportunity* – i.e. the effect of ascriptive traits such as social class origin on educational attainment (Breen and Jonsson 2005) – conceptualize individuals' educational careers as series of transitions (e.g. Mare 1980; Boudon 1974). Thus, educational decisions at these transitions become “nodal points” of the link between social origin and educational attainment (Hillmert and Jacob 2005; Hillmert and Jacob 2010) and, to address why social class differentials in educational attainment are still evident, theories have been developed to explain students' and their parents' educational decision-making. One prominent group of theories takes a rational action perspective (Breen and Goldthorpe 1997; Erikson and Jonsson 1996; Esser 1999b; Goldthorpe 1996b and others).

In practice, however, students and their parents often do not have the only word in educational decision-making. Depending on the specific institutional regulation of a transition from one educational level to another, teachers are involved in the decision-making process or even take the ultimate decision. In some countries, e.g. in the Netherlands or some German federal states, parents take the final school track decision but teachers make guiding school track recommendations; in other countries, e.g. in other German federal states, teachers have the final say. Therefore, questions came up such as how do institutional regulations affect transitions from one educational level to another and, more specifically, how do these regulations shape families' and teachers' decision-making (e.g. Becker 2000; Hillmert 2005).

In France, the regulation of students' transition from lower to upper secondary education considerably differs from that in other countries: families and school staff – notably teachers and the headmaster – are involved in an *institutionalized dialogue between family and school*. The outcome of this dialogue is the decision on which upper secondary school track a student will attend. The first step of this dialogue is a school track request by the family. Aside from a general upper secondary school track and two different vocational tracks, the family can request grade retention. Subsequently, the staff meeting makes a school track proposition. The staff meeting can choose the general track, one of the vocational tracks

or grade retention, too. If a family's request and the staff meeting's proposition do not correspond, the family can reject the proposition. To do so, it has to attend a talk with the headmaster. Based on this talk, the headmaster makes a virtually binding decision. Yet, if the family does not want to accept the headmaster's decision, it can reject again and thus initiate a recall meeting. External teachers and other professionals attend that recall meeting and make a final binding decision. At the end of every school year, headmasters have to report rates of disagreements between families' requests and schools' propositions to the governmental authorities (Masson 1994; Masson 1997).

This institutionalized dialogue was implemented amidst important reforms. These reforms aimed at a *démocratisation* of the educational system, which first meant raising the overall level of educational attainment and later also comprised reducing social inequality of educational opportunity (Lapostolle 2005; Mellizo-Soto 2000; Prost 1997). Prior to the implementation of the dialogue in the 1970s and 1980s, the regulation at the transition from lower to upper secondary school required that only teachers made the school track decisions. Through the implementation of the dialogue, power was transferred to families in order to reduce social inequality. Indeed, broad empirical studies for France show that throughout the last decades the association between social background and education has decreased (Brauns 1998; Duru-Bellat and Kieffer 2000; Duru-Bellat and Kieffer 2008; Ichou and Vallet 2011; Thélot and Vallet 2000; Vallet and Selz 2007).¹ Nevertheless, these studies find that there is still a considerable effect of social background on educational attainment at present. Moreover, there are strong effects of social background on transition rates to general upper secondary school, even when student school performance is controlled (Brinbaum and Kieffer 2009; Duru-Bellat, Jarousse and Mingat 1993; Duru-Bellat and Kieffer 2001; Duru-Bellat and Mingat 1989; Ichou and Vallet 2013). This result seems to reveal that the reforms still allow “non-meritocratic” decision-making. In fact, closer empirical analyses of the dialogue indicate that, in the majority of cases, the teachers accept families' requests and thus strengthen the net effects of student social class (Duru-Bellat 1996; Duru-Bellat 2002; Duru-Bellat, Jarousse and Mingat 1993; Duru-Bellat and Mingat 1989; Roux and Davailon 2001). In light of this partial

¹ As for other European countries, there is a debate on whether the association between social background and education has persisted or decreased. Studies focusing on earlier decades also claim that the association has remained constant (Garnier and Raffalovich 1984; Goux and Maurin 1997) while studies analyzing more recent short-term periods find even an increase (Merle 2002). Still, in sum, analyses with sophisticated methods and large data sets show that the association between social origin and completing upper secondary school declined, though social class effects on attaining different types of upper secondary attainments and higher education diplomas has remained (for more details see e.g. Brauns 1998; Duru-Bellat and Kieffer 2008; Ichou and Vallet 2011).

explanation and the fact that the dialogue consists of even more steps than family's request and staff meetings' proposition, the question rises *via which exact mechanisms the effect of students' social background on each step of the dialogue –family's request, staff meeting's proposition, family's decisions to reject, headmasters' and recall meetings' decisions – operates.*

1.1 Learning from the French case

I argue that investigating the mechanisms that generate social class differentials at each step of the institutionalized dialogue between family and school can provide important new findings on how families' and teachers' make decisions under specific institutional circumstances – e.g. when the main decision-making power lies in the hands of the teachers and families have the right to reject – and how social class effects on families' and teachers' educational choices emerge in such an institutional context. This dissertation does not investigate the effects of specific institutional circumstances on families' and teachers' decisions but takes into account and puts considerable emphasis on the specific institutional setting of families' and teachers' decision-making, namely the French institutionalized dialogue. I suggest that an analysis of this institutionalized dialogue can address four major shortcomings of previous research on educational decision-making.

First, elaborate empirical tests of the rational action models on *families' decision-making* reveal that the models cannot fully account for social class effects in families' educational choices.² That is to say, even when considering very sophisticated measures of the theoretical model parameters, they find significant effects of student social origin (Becker 2000; Gabay-Egozi, Shavit and Yaish 2010; Stocké 2007). This raises the question what additional or competing mechanisms contribute to the secondary effects. According to other theories, this unexplained social class effect could be due to class-specific norms and values (e.g. Bourdieu and Passeron 1970), preferences (e.g. Gambetta 1987) or significant others (e.g. Jaeger 2007; Morgan 1998; Morgan 2002; Sewell, Haller and Ohlendorf 1970). Moreover, it is also argued that the *institutional context* (i.e. the institutional regulation of the transition from one educational level to another) causes additional mechanisms to affect families' decision-making in ways that reinforce social class effects on their decisions.

² Since this dissertation investigates educational decisions at the transition from lower to upper secondary school in France, i.e. when students are around 14 years old, I assume that parents are still very involved in their children's schooling decisions and therefore I will generally speak of *families'* and not of *students'* decision-making.

For instance, Becker (2000) proposes that social class effects on families' intended educational decisions differ from those on families' actual decisions because institutional regulations such as teacher recommendations affect families' actual decision-making. In particular, Becker argues that families differ with regard to their belief in their influence on the actual decision in which school their children will be enrolled and differently adapt their actual decisions to teacher recommendations (see also e.g. Wiese 1982, Hillmert 2005). Other suggested micro-mechanisms linking institutional contexts to families' choices are, for instance, that highly stratified educational systems with early transitions and tracks with "dead-ends" increase social class differences because higher-class families are better equipped with knowledge of the educational system (e.g. Jungbauer-Gans 2004; Pfeffer 2008). Even though previous research draws attention to the institutional circumstances of families' decision-making, it either specifies only marginally the mechanisms through which these circumstances could contribute to social class differences and does not directly test them with survey data, or it concentrates on institutional circumstances that do not consider the role of teachers (see also e.g. Erikson and Jonsson 1996; Hillmert 2007; Hillmert and Jacob 2003).

I argue that developing a theoretical model on families' decision-making within the institutionalized dialogue in France can integrate an "*institutional component*" into existing rational action approaches to educational decision-making and thereby contribute to the explanation of secondary effects, i.e. social class effects on educational choices that remain after controlling for performance (Boudon 1974).³ More specifically, such a theoretical model takes into account that families make their school track requests *prior* to school track propositions by the school staff and that families are allowed to reject these propositions. Beyond that, an empirical test of this adapted model can show whether the theoretically expected mechanisms do indeed generate social class effects on families' school track requests within the French dialogue.

Second, previous studies dealing with *teachers' decision-making* provide no elaborate theory that explains why student social origin affects teacher school track decisions and how specific institutional circumstances (e.g. families' right to reject) influence teachers' decision-making. Not only in France student social class has considerable effects on teacher school track decisions. For instance, studies that compare student transition rates in German federal states with binding and non-binding teacher recommendations find that secondary effects are

³ In the German context, for instance, such an "institutional component" is the school track recommendation by the primary school teachers.

smaller in binding contexts, i.e. the context where teachers have the final say, than in non-binding contexts where families have the final word (Dollmann 2011; Gresch, Baumert and Maaz 2009; Maaz and Nagy 2009; Neugebauer 2010). Nevertheless, in both institutional settings students' social background has strong effects on teachers' recommendations even when school performance is controlled. Aside from that, studies show that in non-binding contexts secondary effects on teacher recommendations are even stronger than in binding contexts (Dollmann 2011). Given these findings, it appears to be important to investigate what other determinants than student performance teachers consider when making school track decisions under specific institutional circumstances.

So far, quantitative and qualitative analyses of teacher school track decisions have shown that – apart from school performance – teachers consider students' effort and motivation, docile behavior, school work mastery, participation in class and their parents' capacity to support them (e.g. Hollstein 2008; Perier 1994: 70; Schneider 2011; Stahl 2007). Since these factors are related to students' social origin, they are able to partially explain secondary effects on teachers' school track decisions. This finding is in line with research on teachers' grading-behavior: Studies that analyze discrepancies between objective measures such as test scores and subjective ones such as marks detect *middle-class biases* that more or less remain after controlling for student habits, behavior and other non-cognitive traits (e.g. Ditton and Krüsken 2006; Farkas et al. 1990; Maaz and Nagy 2009).

Both research on teacher decisions and teacher grading-behavior present diverse, partly conflicting, theoretical explanations of their findings. Some put forward arguments of conflict theoretical approaches of Bourdieu (e.g. 1966; Bourdieu and Passeron 1970) or Bowles and Gintis (1976). Other researchers seek more “rational” explanations for teachers' behavior. That is, teachers consider students' traits and abilities which go beyond their mere academic performance in order to better assess their chances to succeed in their future school careers (e.g. Hollstein 2008; Neugebauer 2010; Schneider 2011). Moreover, assuming that teachers behave similar to employers, theories of discrimination were applied (Arrow 1973; Becker 1971). Even though previous findings and theoretical considerations provide important insights in teachers' decision-making, they appear to be only parts of the puzzle. Until now, no comprehensive theoretical approach concretely formalizes teachers' decision-making thereby taking the institutional context into account.

I suggest that developing and empirically testing a theoretical model on school staffs' decision-making within the French institutionalized dialogue can further specify *why* student

social class affects teacher decisions. Since the French governmental authorities require headmasters to report grade retention rates and rates of families' rejections of staff meetings' propositions, it is argued that the staff meetings and headmasters adapt their decisions so as to reduce rejection rates (Masson 1994; Masson 1997; Van Zanten 2002).

Third, investigating the French dialogue between family and school can shed light on how families and teachers influence the decision-making of each other and how *family-school interactions* may contribute to the generation of social inequality in education. Up to now, it was found, for instance, that teacher recommendations have strong effects on school track decisions of lower-class families while higher-class families tend to refrain from following teacher recommendations if they do not correspond to their aspirations (e.g. Ditton and Krüsken 2006; Ditton and Krüsken 2009). Moreover, families' aspirations have strong effects on teacher decisions indicating that families with high aspirations attempt to influence teachers and start early to prepare their children's transition to the next educational level (e.g. Dollmann 2011; Ditton and Krüsken 2006; Ditton and Krüsken, 2009; Schneider 2011). Accordingly, previous research on the French dialogue between family and school reveals that families' school track requests strongly affect staff meetings' school track propositions (Duru-Bellat 1989; Duru-Bellat, Jarousse and Mingat 1993; Roux and Davaillon 2001) and the question is raised whether families' involvement in the dialogue increases social inequality in students' transition to upper secondary education (Brinbaum and Cebolla-Boado 2007; Duru-Bellat 1996; Duru-Bellat 2002; Duru-Bellat and Kieffer 2000). Generally, it seems that families differ in terms of their interactions with the school and therefore differences in families' school track choices and teachers' school track recommendations emerge.

The "cultural approach" to social inequality in educational attainment provides an argument on how family-school interactions contribute to the generation of social class differences in educational success (Lareau and Weininger 2003). It argues that social inequality in education is strengthened because parents are differently equipped with *cultural capital* that meets the school standards: Parents with higher educational attainment and from higher social classes are more confident in the school context, interact more easily with school staff, are generally more involved in school and therefore acquire preferable treatment for their children. Indeed, a set of qualitative studies shows that parents of more favorable social origin are more involved in school and put more effort in influencing teachers (e.g. Lareau and Horvat 1999; Horvat, Weininger and Lareau 2003; Reay 1999) and quantitative analyses of teachers' school track recommendations reveal that teachers take parents' support

of their children *at home* into account (e.g. Hollstein 2008; Schneider 2011; Stahl 2007). However, no studies investigate the impact of parental involvement *in school* (e.g. membership in parent associations, parents' initiation of meetings with teachers) on families' school track decisions and teachers' school track decisions. If parents strategically make use of their cultural capital to meet the standards of the school and hence to receive preferable treatment for their children and teachers take into account whether families meet the school's standards, parents' cultural capital and their involvement in school can be expected to have important effects on families' and teachers' school track decisions (Becker 2000; Ditton and Krüsken 2009; Schneider 2011).

Previous research does not theoretically specify how these family-school interactions influence families' and teachers' school track choices and previous empirical analyses test only parts of the link between social class, cultural capital, involvement in school and educational decisions of families and teachers. Investigating families' and school staffs' decision-making at the transition from lower to upper secondary education in France entails analyzing how family-school interactions and parental involvement in school contribute to the generation of social inequality in educational attainment. This is because the dialogue *institutionalizes* an interdependent decision-making of families and school staff. Moreover, the French educational system promotes parental involvement as it gives parent associations and parent representatives an important voice and strongly requires headmasters to regularly organize school events and parent-teacher evenings (Masson 1994; Masson 1997).

Fourth, analyzing the dialogue between family and school can contribute new findings to research on *grade retention*. While there is broad literature on the consequences of grade retention and the characteristics of retained students (see e.g. the overview by Jimerson et al. 2006), research on families' use of grade retention to postpone crucial transitions is comparatively sparse. Few studies, notably for France, show that when children are poorly performing, families from higher social classes are more likely to demand grade retention than families from lower classes (Davies, Heinesen and Holm 2002; Duru-Bellat, Jarousse and Mingat 1993; Kloosterman and De Graaf 2010; Roux and Davailon 2001). This result indicates that families' opportunity to choose grade retention may increase social inequality in educational transitions and it is argued that letting teachers decide on grade retention could restrict the social class differences that emerge by that way (Kloosterman and De Graaf 2010). However, if – as in France – teachers accept families' grade retention requests (and in the subsequent school year students ultimately get access to higher school tracks) transferring the decision-making power to teachers seems no solution. Moreover, it could be argued that

staff meetings and headmasters use the grade retention option to offer families with high aspirations and low performing children a “compromise” (Cayouette-Remblière and De Saint-Pol 2011; Duru-Bellat 1996; Duru-Bellat 2002; Roux and Davailon 2001).

To theoretically explain social class effects on families’ grade retention decisions, the French literature argues that parents intend to give their children the chance of improving themselves in order to attain the higher school track (e.g. Duru-Bellat, Jarousse and Mingat 1993). Similarly, other studies advance arguments of the educational decision-making models by Breen and Goldthorpe (1997) and Erikson and Jonsson (1996): Families from higher social classes are more likely to choose grade retention than a lower track because they need their children to attain a higher educational track to maintain the family’s social status (Kloosterman and De Graaf 2010). These families hope that throughout the repeated grade their children will sufficiently improve and thus be able to attend the higher educational track later on. Theoretical explanations for teachers’ grade retention decisions are less defined. Generally, it is argued that teachers propose grade retention to enable students to “grow up” and improve (e.g. Schnurr, Kundert and Nickerson 2009). I propose that investigating families’ and school staffs’ grade retention decisions within the institutionalized dialogue in France enables to further detect the reasons why both actors choose these options and via which mechanisms student social class affects these decisions.

In sum, investigating the mechanisms that generate social class differentials at different steps of the dialogue will provide insights in how social class effects emerge on families’ school track choices and their decisions to reject school track propositions by the school, on teachers and headmasters’ school track decisions, on family-school interactions and on families’ and school staff’ grade retention decisions. From these insights, important policy implications can be derived. Knowing how secondary effects on families’ and teachers’ decisions emerge can tell how present transition regulations could be modified and which additional provisions have to be made to reduce social inequality in educational attainment. For instance, further findings can be added to the discussion on whether transferring more decision-making power to teachers could provide more meritocratic transitions to next educational levels (e.g. Becker 2000; Dollmann 2011; Schimpl-Neimanns 2000) and to the advantages and drawbacks of grade retention.

1.2 Research strategy

This dissertation investigates *how social class effects on families' and school staffs' decisions emerge within the institutionalized dialogue between family and school at the transition from lower to upper secondary education in France*. Thereby, it investigates families and school staffs' interactions, i.e. how they attempt to influence each other and whether they take account of each other's prior or future decisions. To find out whether the institutional setting "contributes" to social inequality in families' and school staffs' decisions, I investigate theoretically specified mechanisms on the generation of social class effects at every step of the dialogue.⁴

I approach families' and school staffs' decision-making from a rational action perspective. The theoretical foundation of this work is the subjective expected utility (SEU) theory. I adopt Esser's (1999b) SEU-model on educational decision-making, which is a variation of the rational action models by Breen and Goldthorpe (1997) and Erikson and Jonsson (1996). To develop a theoretical model that explains families' making of their school track requests within the dialogue, I extend Esser's model so that it takes the institutional setting of families' decision-making into account. More specifically, I integrate a theoretical mechanism derived from the "cultural approach" to social inequality in education (e.g. Bourdieu and Passeron 1970). This mechanism is based upon a theoretical suggestion advanced by Lareau and Weininger (2003; see also Lareau 1987; Lareau 1989; Lareau and Horvat 1999) on the role of cultural capital in family-school interactions. It posits that parents and students need cultural capital to meet the standards of the school staff. Namely, schools require parents to be involved in their children's schooling, to help them with their homework, to be interested in their performance and behavior in school and to attend meetings with teachers. Since parents from higher social classes tend to be better equipped with cultural capital that is required by the school than parents from lower classes, they are

⁴ This dissertation does not attempt to detect the effects of certain institutional circumstances on social inequality in families' and school staffs' decision-making (for this e.g. a country-comparison would be necessary), but it specifies mechanisms that are driven through the institutional setting of the dialogue (e.g. through the fact that the school has the final say) and empirically tests these mechanisms. Therefore, in the following I will sometimes speak of how the institutional setting "shapes" or "contributes" to families' and school staffs' decision-making meaning that certain mechanisms caused by the dialogue's institutional setting add to the mechanisms proposed by the "classical" rational action models by Breen and Goldthorpe (1997), Erikson and Jonsson (1996) and Esser (1999b). I do not claim to assess the impact of this institutional context *as compared* to a differing institutional context.

more likely to be involved in interactions with the school and thus they are more likely to meet the school's standards.⁵

Beyond that, I apply SEU-theory to the staff meetings' decision-making and factor in the institutional conditions under which staff meetings make their decisions. These conditions include for instance that schools have to report grade retention rates and rates of families' rejections to administrative authorities. The "cultural capital-mechanism" applied to families' decisions can also explain how effects of students' social class on staff meetings' propositions are generated within the French institutionalized dialogue: On the one hand, parents' cultural capital and their involvement in school show the teachers that parents are capable of supporting their children with school issues. On the other hand, the staff meeting considers parents' cultural capital and their involvement in order to evaluate the likelihood that a family rejects their proposition and therefore increases rejection rates.

Using the refined theoretical models on families' requests and staff meetings' propositions, I make theoretical suggestions on how families make their decision to reject staff meetings' propositions and headmasters' decisions. Moreover, I attempt to explain how headmasters and recall meetings make their decisions following families' rejection. Furthermore, I address the question how families, staff meetings and headmasters make use of grade retention to postpone the binding school track decisions and to offer a compromise to the other party.

To test hypotheses derived from the theoretical models, I use longitudinal data – the *panel d'élèves du second degré* – on a cohort of 17 830 French students who entered lower secondary school in 1995. Depending on whether students have repeated grades, they attained the institutionalized dialogue at the transition to upper secondary school between 1999 and 2001. The data document each step of the dialogue and its single outcome. Moreover, it contains rich information on students' family background, students' school performance in the two grades prior to the dialogue and parents' involvement such as attendance at parents' evenings, membership in a parent association and initiation of meetings with teachers. The data allow me to analyze the direct effects of most parameters in families' decision-making. With regard to the school staffs' decisions, I am not able to directly measure each decision-making parameter. However, available information on students' family background, students'

⁵ This argument is similar to that on knowledge of the educational system advanced in previous studies such as Pfeffer (2008), for instance. As compared to previous research, however, I derive this argument from a general theory, specify it and integrate it in the existing formalized rational action models to educational decision-making (e.g. Esser 1999b).

performance, their parents' educational attainment and involvement in school allows me to test straightforward hypotheses on staff meetings' decision-making.

1.3 Outline

The following chapter provides an introduction to the educational system and thus to the institutional context in which families and school staff make their upper secondary school track decisions. I start with a brief summary of the French educational system's history to give an idea of the values and principles on which the modern French educational system is founded. Subsequently, I describe the general structure of the educational system to show which upper secondary school tracks are at choice for families and the school staff and which higher education possibilities these tracks lead to. I give a lot of attention to the description of the institutionalized dialogue between family and school, relevant school standards (e.g. regular meetings of parents and teachers) and official ways in which parents become involved in school (e.g. through membership in parent associations). Moreover, I mention relevant information on school choice and different school types (e.g. private schools).

The ultimate goal of the theoretical part is to develop a model on families' and school staffs' decision-making that explains the generation of social class differentials along the institutionalized dialogue between family and school. The theoretical part consists of Chapter 3, 4 and 5. Chapter 3 presents and evaluates a *cultural approach* and a *rational-action approach* to social inequality in education. The former approach embraces Bourdieu and Passerons' theory on social and cultural reproduction (Bourdieu 1966; Bourdieu and Passeron 1964; Bourdieu and Passeron 1970) as well as theoretical and empirical research on the impact of cultural capital on educational success and family school interactions. The second approach embraces Boudon's (1974) rational action approach to social class differences in educational decisions and the seminal decision-making models by Erikson and Jonsson (1996) and Breen and Goldthorpe (1997) that are based upon Boudon's approach.

While Chapter 3 focuses on families' educational decision-making, Chapter 4 deals with theoretical considerations on teachers' decision-making. This chapter summarizes and evaluates the theoretical arguments previous research on teacher school track decisions and grading-behavior has put forward to explain why student social origin affects teacher decisions and evaluations.

Chapter 5 is the "heart" of the theoretical part of this doctoral thesis. This chapter develops separate theoretical models that explain families' and school staffs' decisions at each

step of the institutionalized dialogue. It starts with an outline of Esser's (1999b) SEU-model. Then, I refine this model to explain how the institutional context of the dialogue shapes families' school track requests. After applying this refined model also to families' decision to reject the proposition by the staff meeting, I present the mechanisms that generate social class differences in families' requests and rejection decisions. Subsequently, I address staff meetings' making of the school track propositions: Further relying on SEU-theory, I formulate a model that explains how the staff meeting evaluates costs, benefits and probabilities. Then, I apply this model to the headmasters' and the recall meetings' decision-making and present a set of mechanisms that explain the generation of effects of student social class on the school staffs' different decisions. The last part of Chapter 5 addresses families' and staff meetings' decision between grade retention and a lower track. Throughout Chapter 5, I derive a set of concrete testable hypotheses.

Chapter 6 segues from the theoretical part into the empirical part of this dissertation. It presents selected quantitative and qualitative studies that deal with families' and teachers' school track choices. The goal of this chapter is to outline the current state of research. Chapter 7 and Chapter 8 form the empirical part of this thesis. Chapter 7 presents the framework of the empirical test and Chapter 8 describes and interprets the results. In Chapter 7, I present the data – the *panel d'élèves du second degré* – and first sampling steps. Moreover, I explicate the construction of the dependent variables, i.e. the decisions families and the school staff make at different steps of the dialogue, and explanatory variables.

Chapter 8 presents the results of the empirical analysis. The goal of the first subchapter is to illustrate the main *explananda* of this study; it evaluates social class differences in families' requests, staff meetings' propositions and the final outcome of the dialogue. The second subchapter addresses the core mechanisms that explain the generation of social class effects on the different steps of the dialogue. These mechanisms are social class differences in students' marks and parents' involvement in school, for instance. The third subchapter presents a test of the model on families' making of their school track request and their rejection decisions. Subchapter 4 tests hypotheses derived from the theoretical model on staff meetings' propositions, headmasters' decisions and the decisions of the recall meetings. Subchapter 5 takes into account the grade retention option and tests hypotheses on families' and staff meetings' usage of this option as a compromise. Finally, in the last subchapter, I put the three available options – general track, vocational track and grade retention – in relation to each other.

Chapter 9 provides a summary and a discussion of the findings of this dissertation. It confronts the findings of previous research with the results obtained from the empirical analysis presented in Chapter 8 and discusses the implications of this dissertation's findings for educational policy and further research.

2 The institutional context

The goal of this chapter is to outline the institutional context in which families and teachers make upper secondary school track decisions. I start with a brief description of its history ranging from the first important reforms under the Secretary of Education Jules Ferry to the implementation of a comprehensive lower secondary school (*collège unique*) in 1975. This description introduces values and principles on which the modern French educational system is founded and outlines the reasons for stepwise modification of the secondary school system. Thereafter, I provide an overview of the basic structure of the educational system and describe the institutionalized dialogue between family and school. I further address legal regulations and relevant institutional circumstances such as supply of information on the educational system for parents and the organization of parental involvement. I concentrate on two forms of parental involvement namely membership in a parent association and holding the office as Parent representative in several meetings. These involvement forms give an idea of how institutional regulations integrate students' parents into important decision-making and which possibilities parents have to get involved. Finally, I shortly summarize relevant information on secondary school types and on the regulation of school choice.

2.1 History of the French secondary school system

From the French Revolution until the end of the 19th century the state and the church struggled for the authority over the “republican school” (Brauns 1998: 40). The struggle ended in the 1880s when Jules Ferry achieved the implementation of a centralized laicistic primary school system and compulsory schooling from age 6 to 13. At that time, the aim of the school was not at all to reduce social inequality (Prost 1997: 47-49). Nevertheless, it was based on progressive values such as humanism and emancipation: its aim was to form individuals that are capable of independent reasoning and of building a *Republic*, i.e. a society in which people are equal in dignity and have equal rights. This liberalizing and equalizing purpose of the republican school implied that (primary) education had to be *compulsory*, *laicistic* and *cost-free*.⁶

However, the system was socially stratified to a large extent. Children from the main population attended the “primary school” and an “elite” of children of higher social origin

⁶ I denote with italic letters either terms that I want to emphasize or proper names. The proper names include those in their original language.

attended “secondary schools” (*Lycées, Collèges modernes/classique*), which lead to the certificate *baccalauréat* (Brauns 1998: 43-44; Prost 1997: 65, 85-86). Students who had attended primary schools could proceed with their education either in vocational schools or in the prestigious “higher primary schools” (*Écoles primaires supérieures*), to which only students who had passed central examinations were granted access. Students who had successfully attended the secondary schools either entered universities or “preparatory classes” (*classes préparatoire*) that – still today – train students for the admission exams of the elite universities “*Grandes écoles*”. Both school types taught children during their whole – more or less short – school careers; there were no levels of education in which children were jointly taught in one school context. Moreover, at that time, individuals were persuaded that educational success would solely depend on *natural* talents, abilities and intelligence and thus nobody recognized it as a product of socialization in the family or in the school (Prost 1997: 49).

In the early years of the 20th century the politician and Nobel peace prize laureate Ferdinand Buisson, who strongly had promoted the laicistic education, already advanced the idea of a comprehensive unified school for students between the age of 5 and 11 and a subsequent secondary education for students of age 12 to 14 (Prost 1997: 51-52). However, no considerable reforms in such direction were undertaken. After the First World War, social stratification in primary and secondary schools was again strongly criticized by a group of teachers from various schools (*les Compagnons de l'Université nouvelle*) and by socialist politicians. Only few of their suggestions were directly implemented, but their ideas motivated further important developments. In 1923, students who attended the higher primary schools became entitled to enter the higher grades of secondary schools if an examination board gave them the permission (Brauns 1998: 46-47). Secondary education became cost-free in the 1930s and access was generally granted to students who had passed an admission exam. Also, in 1936, the compulsory schooling age was extended from 13 to 14.

Nevertheless, it were the low birth rates due to the war that caused a lack of students in the secondary schools and made them accept students that would have attended the primary schools otherwise (Prost 1997: 87-88). After this lack of students in general, working and lower class students were again more likely to attend primary schools since these seemed better adapted to their “needs” (e.g. ensuring professional jobs). The primary schools became general competitors for secondary schools and, in 1941, under the Vichy government, a reform implemented an “upper cycle” in secondary schools that accepted also students who had attended the primary schools up to then. Another step to further integrate the primary and

secondary schools was the incorporation of the higher primary schools into the *collèges modernes* in 1945.

In the 1950s and 1960s, the call for “democratization” (*démocratisation*) of the educational system motivated important reforms (Prost 1997: 84). The institutional changes went along with promoting demographic developments such as a general increase of educational participation, the general call for equality of educational opportunity and the need for a work force that is qualified to help the modern French economy to prosper. The *Bethoin* reform in 1959 augmented the age of compulsory schooling from 14 to 16 and transformed the upper grades in primary schools (*Cours Complémentaires*) into distinct secondary schools (*Collèges d’Enseignement Général*) (Prost 1997: 241-245). This increased the rate of students from lower and working classes in secondary education. The reform implemented also an “observation cycle” in grade 6 and 7 that aimed at identifying which of the five school tracks available after grade 6 would be appropriate for students. The school decided whether a student had to attend the short general track in the distinct secondary schools (*Collèges d’Enseignement Général*), the long general track in the prestigious *Lycées Modernes* or *Classiques*, the short vocational track of three years in *Collèges d’Enseignement Technique*, the long vocational track of four or five years in *Lycées techniques* or the “terminal cycle” that led students with very low performance to an elementary school diploma. The schools’ school track decisions were supposed to be based upon students’ aptitudes.

In 1962 a study commissioned by the French government that revealed that given the same performance, students from higher social origin had higher chances to attend the *Lycées* than students of lower social origin (see also Girard and Bastide 1963) and Bourdieu and Passeron’s (1964) work “les héritiers” launched passionate discussions on inequality of educational opportunity (Masson 2001; Prost 2001; Van Zanten 2005). Amidst these discussions, in 1963, the *Fouchet* reform went on integrating the different secondary schools and implemented an “orientation cycle” in grade 8 and 9 (4^{ème}-3^{ème}). The “orientation cycle” incorporated the “observation cycle” and stretched over the first four grades of secondary education. As a consequence of this modification, the *main* selection of students – fully based on a decision by the school – into general and vocational tracks was postponed by two years to the end of grade 9. Another major change was that students attended the full four grades of the “orientation cycle” in one single comprehensive secondary school named “*Collège d’enseignement secondaire*”. However, the school was still divided into a general academic branch, a general vocational branch and a more practical vocational branch, into which students were selected in accordance to their performance. After grade 9 in the comprehensive

college, students were selected –based on their aptitudes again – into one of three available tracks: (i) a long general track leading to the general diploma “*baccalauréat*”, (ii) a short general track with one additional completing year or two years leading to vocational training and (iii) a practical cycle level to finish secondary education. Although the goal of the reform *Fouchet* was to postpone the important selection to grade 9, many poorly performing students left the *collège* after grade 7 and attended pre-vocational education. Moreover, the three branches were still socially stratified.

Last important changes finally caused the “Law Haby” (*Loi Haby*) in 1975. It fully integrated the remaining separate secondary schools into one general type of secondary school that is simply named *collèges*. Grade 6 and 7 that had been divided into three branches (one general and two types of vocational branches) became one unified branch (*tronc commun*); grade 8 and 9 remained divided into one academic and one vocational branch. At this level students could also directly enter pre-vocational education if their performance was not good enough to stay in the *collège* (Brauns and Steinmann 1999: 12-13). Then they attended two specific successive classes (*Classe Préprofessionnel de Niveau*, CPN; *Classe Préparatoire à l'apprentissage*, CPA). These grades prepared for an apprenticeship. Typically, this educational path led to early entry into the labor market or vocational certificates and was held in low esteem. After the full “orientation cycle”, i.e. after grade 9, students were selected into a long general track, a long vocational track within the same school or a short vocational track in another school. The tracking in upper secondary education is very similar to today and will be outlined in more detail in the next section.

2.2 Structure of the French educational system

In France, the educational system is highly centralized (OECD 1996: 273-276). The authorities at the state-level have the decisive power over core issues such as education policy, national curricula, teachers’ recruitment and their remuneration, the centralized organization of exams for diplomas such as the *baccalauréat*, which provides access to university studies, and the conferment of these diplomas. However, since the 1980s more and more responsibility has been transferred to the *académies*, *départements* and municipalities.⁷ The educational administrative area is divided into 30 *académies*, which mainly correspond to the French regions (*régions*). 26 lie in metropolitan France and 4 lie in the overseas territories (Guadeloupe, Guyana, Martinique, Reunion). Every region is divided into *départements*;

⁷ Actually, there were discussions about decentralization and first small reforms already in the decades before, but the main changes happened in the 1980s (Combaz 1996).

overall there are 101 *départements*. Generally, *académies* have been charged with the provision and financial management of upper secondary schools (*lycées*), *départements* have taken over the corresponding responsibility for lower secondary schools (*collèges*) and communes are responsible for nursery schools and primary schools. Regions are now also commissioned to develop regional education and investment plans and to present these to the authorities on the national-level. Though, as the educational system is still highly centralized, its structure is the same everywhere in France.

Compulsory education starts at the age of 6 (Figure 1). However, nearly all children are already enrolled in preschools (*école maternelle*). Preschools can be attended from the age of 2 to 5; typically, children do so from the age of 3 (OECD 1996: 273-276). Primary schools (*école élémentaire*) teach children during 5 years from age 6 to 11. Secondary education starts at the age of 10 or 11, depending on whether parents decide to enroll their children prematurely. Up to grade 9, the students jointly visit the *collège*. Grade 8 and 9 form the “orientation cycle” which consists of a more academic branch and a more vocational branch (4^{ème}, 3^{ème} *technologique*). At the end of grade 7, the school allocates students in the respective branches.⁸ Virtually, students can also directly enter pre-vocational education and prepare for an apprenticeship. The two preparing grades (CPN and CPA, see the prior subchapter) are attended in vocational upper secondary schools (*lycée professionnel*); during the apprenticeship students attend “centers for training of apprentices” (*Centre de Formation d’Apprentis*). After three or four years this track leads to the vocational certificate termed “CAP”. This track has been gradually eliminated since the 1980s by integrating students into the vocational branch of grade 8 and 9 of the *collège*. The elimination of the separate early vocational track and the implementation of the vocational grades 8 and 9 was part of the project to increase the rate of students with a *baccalauréat* to 80 per cent in one age group (Lapostolle 2005).⁹

Lower secondary education ends with the centralized *brevet*-exam. Students who successfully pass the whole exam are rewarded with the *brevet*, i.e. the certificate of lower secondary education. During the “orientation cycle” marks play an important role as they are taken into account by the *brevet*-exam. More specifically, students’ marks in grade 8 and 9

⁸ The selection of students into one of the two branches is based on their performance in grade 6 and 7. However, parents can object (Brauns and Steinmann 1999: 12).

⁹ In 1998, a famous law was implemented that explicitly stated that 80 per cent of an age group of students should attend the upper secondary certificate that provides access to tertiary studies (*baccalauréat*) (*Loi n°89 - 486 du 10 Juillet 1989 – Loi d’orientation sur l’éducation*). This requirement was based on an announcement of the socialist Secretary of Education Jean-Pierre Chevènement in 1985. Indeed, the target was attained and the overall duration of education was largely augmented (Lapostolle 2005).

determine their score on the “continuous examination” (*contrôle continu*) of the *brevet*. The second part of the *brevet* is a written and an oral exam at the end of grade 9. The score on the “continuous exam” typically represents 60 to 63 per cent of the final score (DEPP 2008).

After the “orientation cycle”, i.e. at the end of grade 9, students follow up their education either in a general upper secondary school track or in the vocational upper secondary school track (Figure 1 indicates the entry to these two tracks by large black arrows). Which of the tracks they will attend is decided via the institutionalized dialogue between family and school or – as it is also called in the French literature – the “orientation procedure at the end of grade 3” (*procédure d’orientation en fin de 3^{ème}*). The general track is further divided into an academic track that ends, after three grades, with the “general baccalauréat” (*baccalauréat général*) and a more professional track that leads, also after three grades, to the “technological baccalauréat” (*baccalauréat technologique*).¹⁰ The more professional track is also termed “long technological track”. The school that provides the two tracks is the “*lycée général et technologique*” (LGT). Students can also attain a “technician’s diploma” (*brevet de technicien*; not denoted in Figure 1) if they complete two grades of the more professional track. The school students attend in the vocational upper secondary school track is called “*lycée professionnel*” (LP). The students who successfully complete two grades in this track can drop out with the vocational certificates “CAP” (Certificate of Vocational Aptitude) or “BEP” (Diploma of Vocational Studies); those who attend four grades usually achieve the “professional *bac*” (*baccalauréat professionnel*).

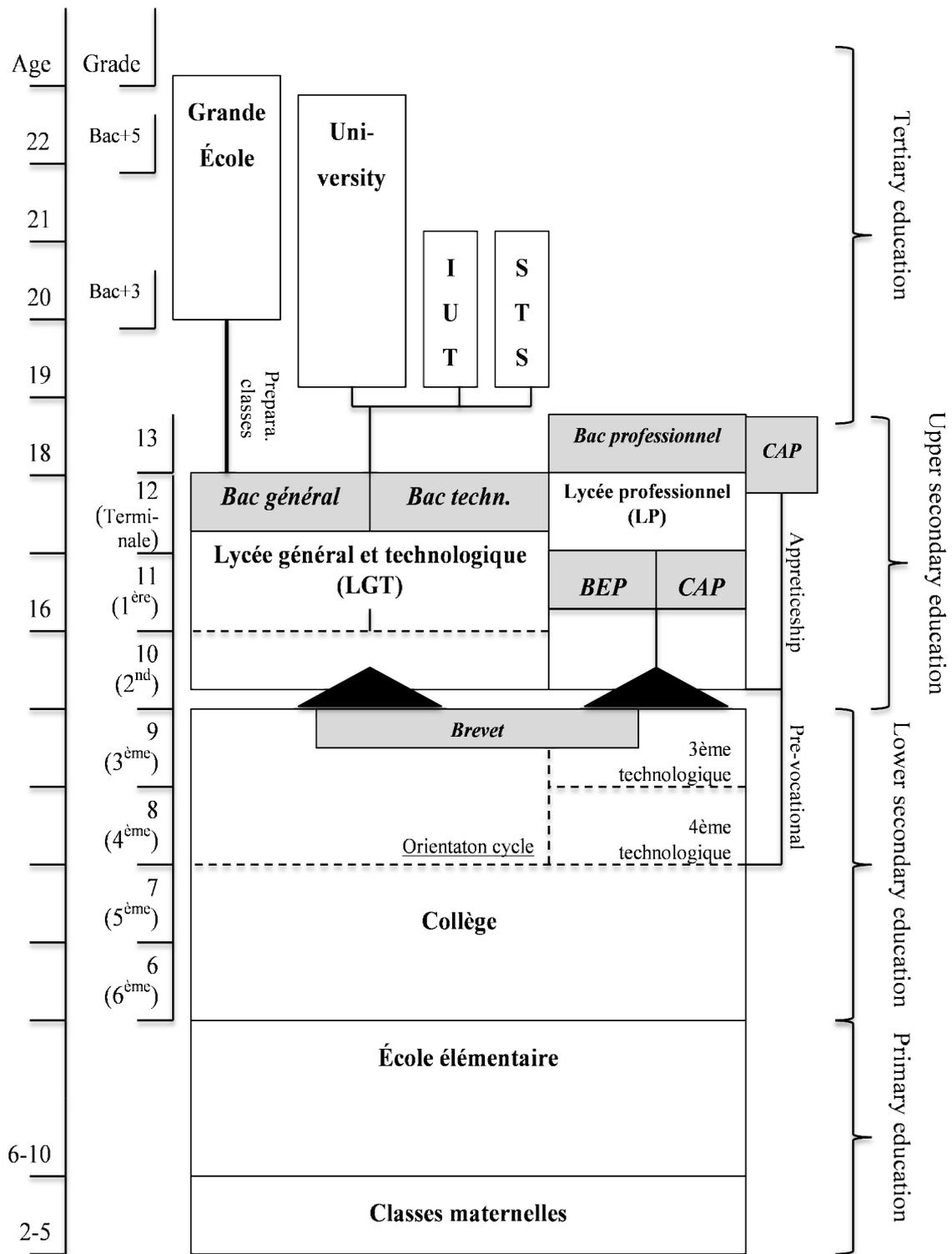
The CAP and the BEP formally have the same “value” but the BEP has a more theoretical foundation and provides a broader qualification than the CAP (Brauns and Steinmann 1999: 13-14). The CAP is rather an apprenticeship credential and a steppingstone to the craftsmen masters certificate (*Brevet Professionnel*) that can be attained after at least two years of specific professional experience. Generally, the CAP is regarded as “lower” as compared to the BEP with the consequence that this is a rather unpopular educational path. Students who achieved a BEP (or a CAP) can attain the professional *bac* after two additional years. The professional *bac* was introduced in 1985 to give vocational education a better reputation and to make it possible for students who after grade 9 opted for the short vocational track to revise their decision by achieving a professional *bac* (or even a technological *bac*) and gaining access to tertiary education (Brauns and Steinmann 1999: 14).

¹⁰ In the following I abbreviate *baccalauréat* with the term *bac* as it is common in the literature.

All *bac*-diplomas allow for entry into higher education (OECD 1996: 273-276). However, while students with a general *bac* more often go to university, their peers with a technological *bac* rather opt for vocational higher education. The differentiation of the three types of *bac* was meant to enable students to choose educational pathways in accordance with their interests, but in practice it became a means of selection (Brauns and Steinmann 1999: 15). The same applies to the differentiation of “sections” within the general *bac*: After grade 10 students can decide whether they want to achieve a “*bac S*”, i.e. a *bac* mainly based on mathematics and physics, a “*bac ES*”, which is based on social and economic studies, or a “*bac L*” implying literary studies. The “*bac S*” is the most prestigious diploma as only very good students attain it. Regarding the technological *bac*, there are even more specializing “sections”. The choice of general *bac* type is strongly influenced by student social origin and linked to the level of tertiary education that will be attended (Duru-Bellat 2002: 85-87).¹¹

¹¹ The decision-making at the end of grade 10 is based on an institutionalized dialogue between family and school that is similar to the one at the end of grade 9.

Figure 1 The French educational system



Note: Grey boxes denote certificates. Tertiary education is presented less detailed. For a more detailed description see e.g. OECD (1996: 275) or Brauns and Steinmann (1999: 11).

Tertiary education is very differentiated (not all details are presented in Figure 1). Due to the great number of *bac*-holders, the system of tertiary education was filled up with various institutions and possibilities to achieve tertiary certificates after diverse durations of studies. Typically, after three years of studies in a university, students can attain a “*licence*” (also termed “*bac+3*”), after 5 years they are rewarded with a “*master*” (“*bac+5*”) and adding three more years they can attain a doctorate (“*bac+8*”).¹² Only access to the “*licence*” is open for all *bac*-holders; access to the higher levels of studies depends on examination results and other selection criterions. The technological *bac* is supposed to prepare students for tertiary studies in a “*Section de Technicien Supérieur*” (STS) or in an “*Institut Universitaire de Technologie*” (IUT). During two years students follow a fixed course schedule and pass several weeks in internships to be qualified as technicians. Those who attend the STS – which is usually located in a general upper secondary school (LGT) – attain the “*BTS*” (*Brevet de Technicien Supérieur*). Two years in an IUT are rewarded with a “*DUT*” (*Diplôme Universitaire de Technologie*). Admission to both institutions STS and IUT is selective and notably the IUT has a good reputation. Aside from STS and IUT, which train technicians, there are other institutions at the same lower tertiary level that qualify nurses, kindergarden- and primary-school teachers (Brauns and Steinmann 1999: 17). To get access to the elite universities “*Grandes Écoles*” students have to pass difficult and demanding national admission examinations. Throughout at least two years, “*preparatory classes*” (*classes préparatoires*) prepare students for these exams. Often, the preparatory classes take place in *lycées*.

2.3 The dialogue between family and school

The gradual establishment of a comprehensive lower secondary school – the *collège* – in the 1960s and 1970s was a difficult endeavor that was characterized by some negative consequences. Prost (1997: 104-111) summarizes three failures or problems that occurred and led to additional reforms. First, a lot of students left lower secondary school *already* after grade 7 (5^{ème}) in order to do an apprenticeship or to attend the vocational upper secondary school and attain a CAP after three years. Moreover, the rate of grade retention increased considerably. Second, the selection of students into different upper secondary tracks appears not to depend on student’s achievement and preferences only but also on the availability of positions in the surrounding general and vocational upper secondary schools and in firms that provided apprenticeships. Third, due to these two problems, distinct social class differentials

¹² Certain other studies such as medical studies are organized differently.

in student's attendance of the different upper secondary tracks appeared. The number of students from lower classes in the general upper secondary school track decreased more and more and this was even more unfortunate as yet it had started to constantly increase since World War I.

These developments made the public and politicians increasingly call for a “democratization” of the educational system. Initially, *quantitative democratization*, i.e. the augmentation of the overall duration of education, was tackled through actions like the gradual elimination of the vocational track that led to a CAP after grade 7 and the implementation of the vocational branch in grade 8 and 9 within the collège (Brauns and Steinmann 1999; Lapostolle 2005).¹³ Later, particularly in the 1980s, the *qualitative democratization*, i.e. the reduction of social inequality in the selection into different educational tracks, became more and more relevant. The educational system and notably the teachers' selection procedures were made responsible for the social disparities and thus giving more attention to the family's choices appeared to be a solution (Lapostolle 2005; Van Zanten 2002). Up to then, the teachers' assignment of students to secondary tracks had been based on students' marks (especially in mathematics) and age (Prost 1997: 107). A selection based on these “objective” indicators was perceived as narrow and as putting a lot of pressure on students. Generally, it was criticized that the well being of the *individual* student was disregarded.

Already in 1973, an enactment (*Décret n°73-129 du 12 février 1973*) invited families to pronounce their school track wishes and gave them the opportunity to reject the school's decisions. If the family rejected the decision, it could ask either for a recall meeting that is put together and directed by the Ministry of Education or for a standardized test. However, despite the legal formalization of a dialogue between family and school, there appeared no effective modification of the selection (Mellizo-Soto 2000). It was criticized, for instance, that teachers' decisions still had too much weight, that families were not sufficiently informed about their rights to object and that there was not enough exchange between the staff meeting, the family and the student (Lapostolle 2005). Finally, the *1989 Orientation Law* reinforced the implementation of the dialogue between family and school. With article 8, the “orientation procedure” was made more concrete. Article 8 posits:

¹³ Other actions promoting quantitative democratization were the implementation of comprehensive lower secondary schools that students jointly attend until a relatively high age (see Subchapter 2.1) and the before mentioned law from 1998 (“1998 Orientation Law”) that required that 80 per cent of a student age group should achieve the *bac*.

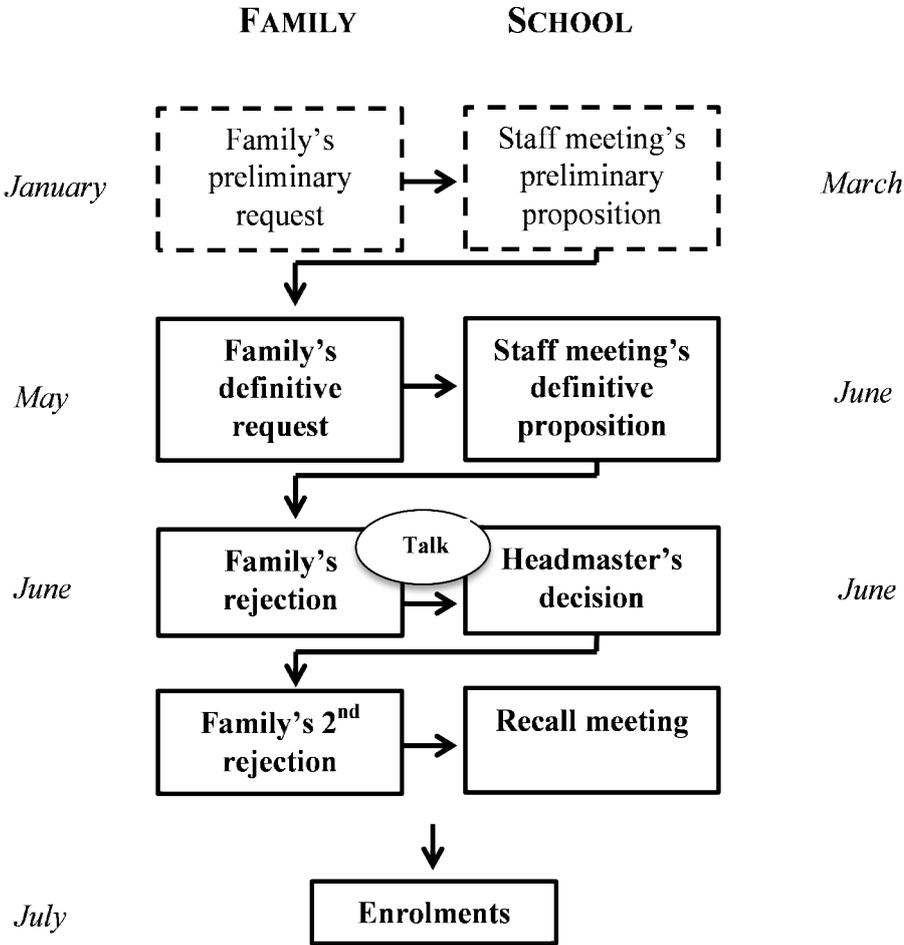
“[...] The student works out his/her educational orientation plans with the help of the school and the educational community, in particular the teachers and the orientation advisors, who will support the student in realizing his/her educational plans during schooling and at its ending. The orientation decision is based upon a continuous observation of the student. The family is responsible for the student’s choice; the student is responsible when he/she is of full age. Every disagreement with the proposition of the staff meeting becomes part of a talk prior to a decision by the school principal. If this decision does not correspond to the request of the student or the family, it is [still] valid. The orientation decision can be part of the recall procedure”¹⁴ (*Loi n°89-486 du 10 juillet 1989, §8*).

2.3.1 PROCEDURE OF THE DIALOGUE

The dialogue starts at the end of the second trimester of grade 9. The first step is family’s preliminary school track request (see Figure 2): In January, students receive an “orientation dossier” via which their parents have to tell their school track demand. Families can also indicate a second choice. Moreover, students have to outline their school track choice and educational plans with some words. The “orientation dossier” (*fiche navette*) is “the main instrument within the dialogue between the families and the different categories of secondary school agents” (Masson 1997: 135). At the end of the school year, it will be transferred to the regional educational authorities and administration (*rectorat* and *inspection académique*) to be used for the official statistics on family requests. The family can choose one out of four alternatives: (i) the general upper secondary school track, i.e. attending the *lycée général et technologique*; (ii) the higher vocational track, i.e. attending the first grade to attain a BEP at the *lycée professionnel*; (iii) the lower vocational track, i.e. attending the first grade to attain a CAP at the *lycée professionnel* (or in “centers for apprenticeship training”, CFA); (iv) grade repetition.

¹⁴ Own translation.

Figure 2 The institutionalized dialogue between family and school



After the family has filled in the dossier the student submits it at his or her school. Within the next 2 to 3 months, the staff meeting discusses the family's request and makes a (preliminary) proposition. The family is informed about the proposition before the end of the second trimester. The staff meeting (*conseil de classe*) is attended by all of a student's teachers, the class teacher, the headmaster, an "orientation advisor" (*conseiller d'orientation*), Parent representatives and students' representatives (*Décret 85-924 1985-08-30 jorf 31 août 1985*). Formally, during the meeting the class teachers or the orientation advisor present each student's written outline of her educational projects and thereby her school track requests (*Circulaire n°95-057 du 8 mars 1995*). Then, the teachers of the student evaluate her school performance and decide on an upper secondary school track or grade retention. Hence, like the family, they can choose between the four options (i) general track, (ii) higher vocational track, (iii) lower vocational track, and (iv) grade repetition. Moreover, they can make more

than one proposition, too. The regulations of the dialogue require the staff meeting to provide an explanation for their decision and, in case a student is likely to not get access to the track she requested, the teachers have to formulate requirements that she has to meet (e.g. improvement of marks in certain subjects). The reasons for the staff meeting's decision and the requirements are written down in the "orientation dossier" or in another formal document. Legal regulations explicitly state that the headmaster has to make sure that the information is transferred to the family (*Circulaire n°95-057 du 8 mars 1995*). If the proposition by the staff meeting does not correspond to a family's preliminary demand, the school is required to further communicate with the family. Around May the families have to tell their definitive school track requests via the orientation dossier and at the end of the school year, in June, the staff meeting makes its definitive school track proposition. Mostly, the definitive decisions correspond to the preliminary ones.

If a family does not agree with the staff's decision, it can reject it. In order to do so, the family has to tell the rejection via the orientation dossier. Moreover, it has to come to the school to meet the headmaster. A family's rejection – step three of the dialogue – can only lead to a reconsideration of a student's case if the family attends this obligatory talk with the headmaster. In case a family does not, the staff meeting's proposition remains binding. Based upon the obligatory talk with the family, the headmaster makes the school track decision.

Families have the right to reject headmasters' decisions, too. If a family wants to reject, it has to do so within an exact period of very few days. Given this second rejection, a general meeting of external teachers, external headmasters and parent representatives take a final binding decision. The meeting takes place on the level of *départements* (higher governmental level). The student and the family are admitted to this meeting. The headmaster expresses the school track decision that is generated by this "recall procedure" (*procédure d'appel*). This is the binding outcome of the dialogue. Typically, a second rejection happens only in few cases.

During lower secondary school, the staff meeting can propose grade retention also at the end of grade 6, grade 7 and grade 8 (Masson 1994). Families can reject this proposition. If they do so at the end of grade 6 or grade 8, they have to talk to the headmaster and the headmaster makes a virtually binding retention decision. If the parents still do not agree, they can initiate a recall meeting. By contrast, family's rejection is binding at the end of grade 7: If the family does not agree, the student is not retained.

It is important to note that every school year the headmasters have to report grade retention rates, the distribution of final decisions of the dialogue and rates of discrepancies

between families' requests and staff meetings' propositions to the administrative authorities (Masson 1994). These statistics are published by the *départements* and thus enable the public to see the rates of every secondary school. A qualitative study of the dialogue reveals on the one hand that headmasters who do not meet the requirements of the *académie*-authorities (e.g. because their school has too high rates of discrepancies) are contacted by these and told to modify their decision-making procedures (Masson 1994: 169). On the other hand, the study shows that headmasters who meet the requirements have good career prospects: For instance, they can get prestigious positions in municipalities.

The publication of these indicators of "school quality" is criticized since it seems to reinforce social class effects on school choice. Families of higher social origin are more likely to obtain this information as it is published in newspapers and as they tend to better understand it than lower class families (Karsten, Visscher and De Jong 2001). Moreover, as the information fuels competition between schools, it puts pressure on headmasters and teachers and creates conflicts between them and student parents (Van Zanten 2002). The school staff perceives the published school evaluations as bureaucratic instruments of control and they make teachers and headmasters feel deficient. Researchers criticize that the published indicators do not increase school's quality as policy has expected, that no *independent* institution publishes them and that they are not corrected for social class or other "biases" (Karsten, Visscher and De Jong 2001).

2.3.2 SUPPORT AND FORMAL INVOLVEMENT OF FAMILIES

The first article of the *1989 Orientation Law* requires that students work out their educational plans including their decisions on school tracks, university studies and professional plans with the help of their parents, teachers, the orientation advisors and other responsible school staff. Moreover, the article states that the working out of students' educational plans has to be based on his or her abilities and aspirations. Finally, the concerned administrations, local communities, associations, and firms contribute to help students work out their educational plans.

More specific legal regulations define the dialogue at the end of grade 9 (*3^{ème}*) as "a continuous procedure that is led by the headmaster and that is based on a permanent dialogue between the school staff, the students and their families" (*Circulaire n°95-057 du 8 mars 1995*). According to these regulations, the goals of the dialogue are to make students and their parents better understand the decisions of the staff meetings, to help them identify their abilities and aspirations and to meet the requirements of their teachers. The student can ask

for help from the orientation advisor, too. To achieve these goals, it is suggested that the schools organize regular meetings of the families and the teachers; there has to be at least one meeting in the second trimester.

At the beginning of the school year, headmasters have to distribute to families a folder that contains a calendar with the dates of meetings and a detailed outline of the procedure of the dialogue (*Circulaire n°95-057 du 8 mars 1995*). The folder also provides information on how exactly the student has to write down his or her educational plans and school track demand. *All* students and parents are supposed to know how the dialogue functions and are supposed to be able to take advantage of it. Brochures about the dialogue and the available educational options are handed to the students and, as more and more households have access to the internet, families are today informed about internet links to informatory pages of the ONISEP (national office of information on schooling and vocations) and the Ministry of Education. Moreover, in the third trimester, the families are invited to open hours at the different upper secondary schools and at the firms that offer apprenticeship positions (Masson 1997). Nevertheless, students and parents report to not feel well informed and perceive some of schools' informatory activities as needless (Caille 2005; Masson 1997).

Finally, the orientation advisor is charged to inform students and their parents about the different secondary education tracks and to help them elaborate their academic or professional projects. The orientation advisor usually is an external professional employed by the Ministry of Education who has a degree in psychology and who has attended two additional years of special schooling (Masson 1994). Orientation advisors are in charge for several schools where they meet students and parents once a week and attend the staff meetings. Typically, they have other goals than the headmasters and therefore the headmaster attempts to keep down their voice in the decision-making procedures (Masson 1994).

Parent representatives

The *1998 Orientation Law* states:

“The students' parents are members of the educational community. Every school [primary school, lower secondary school and the different types of upper secondary schools] makes sure that they participate in school life and in the dialogue with the teachers and other school staff. Students' parents take part in the administrative meetings of the school and in the staff meetings via the parent representatives. [...]” (Loi n°89-486 du 10 juillet 1989, §11)

This quotation reveals that parent representatives should play an important role within the dialogue. Moreover, law requires the schools to ensure that the representatives can

effectively execute their office (MEN2013c). For instance, schools are supposed to organize their meetings in ways that make it possible for the representatives to attend the meetings (e.g. in the later afternoon or evening). Further, schools have to make sure that the representatives have all the information they need to accomplish their tasks. Representatives are allowed to communicate information they obtain from the official meetings they attend.

Annually, the election of parent representatives takes place. All parents (and legal guardians) of students enrolled in the school have the right to vote. The school staff is required to strongly incite parents to vote. The election is very formal and many aspects are defined by legal regulations. Parent associations as well as parents who are not members in parent association can submit a list of candidates. The candidates are allowed to canvas. Parent representatives are elected for the “school council” (*conseils d'école*) and the “administration advisory council” (*conseils d'administration*) of the school (Horvat, Weininger and Lareau 2003). The school council decides on school-internal issues regarding, for instance, school canteens, the utilization of rooms and materials, and the organization of additional activities. Members of the administration advisory council decide on the budget, discuss general issues regarding the school and formulate the school’s opinion on modifications of the educational system that have been decided by authorities on higher governmental levels. The presence of parent representatives in these decision-making institutions indicates that the government puts emphasis on giving power to students’ families. However, qualitative studies of staff meetings indicate that Parent representatives act rather passively and tend to agree with teachers (Masson 1994). One can expect that representatives in school councils and in advisory councils are reserved, too. At least formally, Parent representatives have a lot of decision-making power.¹⁵

Two parent representatives (per class) attend the *staff meeting*. According to an enactment from 1985 (*Décret 85-924 1985-08-30 jorf 31 août 1985*), they are selected through the following procedure: In the first trimester of grade 9 the headmaster meets with the parents who have made successful lists of candidates for the annual election of representatives for the administration advisory council. These individuals represent either a parent association or “independent” groups of parents. In a meeting with the headmaster, they

¹⁵ Aside from the school council and the administration advisory council, there are other committees on the school-level: the “permanent commission” (*commission permanente*) which prepares decisions for the administrative advisory council, the “disciplinary meeting” (*conseil de discipline*) which resembles the staff meeting and decides on sanctions such as school exclusions, and the “commission for sanitation and security” (*commission d'hygiène et de sécurité*). Basically, the parent representatives that are member of these councils have been chosen by the parent representatives in the administration advisory council (MEN 2013a).

suggest parents for the role of parent representative in the staff meetings. The headmaster selects two main parent representatives (and two substitutes) in accordance with the results of the elections. That is to say, the headmaster has to privilege parents that have been suggested by the parent association or the “independent” group of parents who achieved a lot of votes in the annual elections. The headmaster still has the final word on who definitively attends the staff meetings since he decides which of the suggested parents will be representatives. Therefore, the headmaster seems to have some scope to choose Parent representatives that suit his interests (e.g. parents who are “submissive”).

Parent associations

In France, parent associations are prevalent and have – through their representatives in different councils – considerable influence on educational issues at various governmental levels. There are three main national parent unions that represent the interests of students’ parents who are attending *public* schools (MEN2013d).¹⁶ As an example, the oldest one is the “union of parents of students in public education” (*fédération des parents d’élèves dans l’enseignement public*, PEEP); it was founded in 1905 and incorporates 5.000 associations located all over the country (PEEP 2013). The other two unions started their work in the 1940s and 1960s and also manage large numbers of associations. Typically, there is an association for every *département* that has local associations in municipalities. The unions and associations vary with regard to the ideas they represent.

Parent associations are legally allowed to inform students and parents and to communicate with them within the schools (MEN 2013c). That means, for instance, that they have the right to hang posters, distribute brochures and organize meetings in the school buildings. They even have an own room in schools (MEN 2013a). As mentioned before, the parent associations mainly exert influence through “their” Parent representatives, i.e. the Parent representatives that are members in the parent association. These do not only take part in the councils on school-level (administration advisory council, school council and staff meeting), but can be selected into important committees on higher governmental levels, too.¹⁷

¹⁶ There are specific parent associations representing parents of students enrolled in *private* schools, too. The main union is the UNAPEL. Since this book focuses on the majority of students who are enrolled in public schools, I mainly address the associations that are involved in public education here.

¹⁷ For instance, there are parent representatives on the national level in the “superior council of education” (*conseil supérieur de l’éducation*, C.S.E.) or on the level of the *académies* in the “*académie’s* council of national education” (*conseil académique de l’éducation nationale*, C.A.E.N.). The C.S.E. is involved in the decision-making of the ministry of education, while the C.A.E.N. addresses all educational issues in a respective *académie*. In view of the research topic of this book – the institutionalized dialogue between family and school – it is important to note that, on the level of the *département*, three parent representatives attend the “recall

Generally, parents can become member of each parent association that is responsible for the *département* in which their children's school is located. They pay an annual subscription and, apart from having their interests represented by the parent association, they can benefit from several services: If they have questions regarding their child's schooling, they can call hotlines and ask for brochures. They can subscribe to the informatory journal of the association and cover "school insurance", too. As mentioned above, members of the associations can become candidates for the function as parent representative at several councils and meetings. The representatives receive training by the association they are member in. The government funds this training.

In sum, the dialogue seems to be embedded in an institutional context that promotes parental involvement and information: Headmasters have to regularly organize parents' evenings and other events that provide parents with relevant information, schools have to support the work of parent associations, parent representatives attend different administrative meetings in which they have a voice and professional orientation advisors help students and parents develop educational plans. However, institutional regulations such as headmasters' ultimate selection of parent representatives seem, at the same time, to restrict parental involvement. Moreover, previous research indicates that parents and students find informatory events like open hours at firms useless and still feel uninformed about the concrete criteria on which the staff meeting and the headmaster base their school track decisions (Caille 2005; Masson 1997). Moreover, only 17 per cent of parents are PA-members (Caille 1992: 20) and parent representatives act passively in the staff meetings and therefore seem not to make much use of their "power" (Masson 1994). Hence, schools formally define involvement standards and promote parental involvement and information but in practice not all parents seem to meet these standards and benefit from their institutionalized involvement.

2.4 School choice and school types

2.4.1 THE SCHOOL MAP

In 1963, along the facilitation of access to secondary schools (see Subchapter 2.1), school choice was restricted. The government introduced a "school map" (*carte scolaire*) that assigned a district to every school and thereby defined that students had to be enrolled in a school near to their home (Brauns 1998: 67; Meuret, Broccholichi and Duru-Bellat 2001: 38-

meeting" (*commission d'appel*). Again, this is the institution that makes a final decision in case a family has rejected the staff meeting's proposition *and* the subsequent decision of the headmaster.

39). On the one hand, the map enabled the governmental authorities to plan the supply of the schools with staff and other resources. On the other hand, the map was supposed to contribute to the “democratization” and to reduce social inequality. It was required that every student had a secondary school located in short distance and, consequently, would not have to account for high transportation costs (*Circulaire du 3 mai 1963*). However, as the districts themselves differ with regard to their social distribution and families of more favorable social origin found ways to circumvent the restriction (notably by enrolling their children in private schools), the “school map” did not considerably alter social segregation in schools.

Later, in the early 1980s, the local commitment was increasingly softened because it seemed inconsistent to leave the choice of private schools unrestricted while the “school map” restricted the choice of public schools (Meuret, Broccolichi and Duru-Bellat 2001: 39-42). Moreover, a poll commissioned by the Ministry of Education in 1982 revealed that a very large part of parents of children attending public and private schools strongly favored a free choice.¹⁸ However, as the “experimental” softening of the “school map” caused new political and budgetary problems, a compromise was developed which is still defining school choice today: Students have to attend the (lower or upper secondary) school they are locally assigned to, but they can request an exceptional permission (MEN 2013b; Code de l'éducation - Article D211-11). This request has to be addressed to the authorities at the level of the *académie*. For every school year the *académie* defines how many students each school located in its area will be able to teach. Depending on whether this maximal number of free places is filled with students who are officially assigned to a school, the *académie* gives the permission to students from other districts to enroll in that school.

Given this school choice regulation, families from higher social classes are more likely to make use of the possibility to circumvent the school map and to enroll their children in schools with more favorable social distributions (Ballion 1986; Broccolichi and Van Zanten 1997). As mentioned above, this phenomenon is reinforced through the publication of school quality indicators such as retention and rejection rates (Karsten, Visscher and De Jong 2001). Therefore, headmasters are very concerned with their school's image and teachers are not only valued for their teaching ability but for their loyalty to the school, too (Van Zanten 2002: 291). Again, the competition between schools was supposed to increase schools' quality but it is strongly questioned whether this goal was achieved (Karsten, Visscher and De Jong 2001).

¹⁸ Considerably fewer teachers favored the freedom of choice.

2.4.2 ZEP-SCHOOLS AND PRIVATE SCHOOLS

With the gradual decentralization already mentioned in Subchapter 2.2 schools became more autonomous. The purpose of the decentralization was to give the schools the possibility to take into account their “individual” social composition and to take action against social inequality. As it is common for decentralization movements, the public and politicians were persuaded that decisions made at the national level could not be effective because they were taken far apart from the actual scenes and, consequently, did not take into account the specific local needs (Meuret, Broccolichi and Duru-Bellat 2001: 36). From summer 1981 on, each school was charged with the planning and implementation of specific educational projects that aim at the reduction of social inequality (*Projets d’actions éducatives*) (Combaz 1996). Reforms in 1983 and 1985 gave *collèges* and *lycées* the right to decide on the composition of classes, time schedules, cooperation of the school with social, cultural and economic institutions in the local area, and the organization of additional cultural, educational and sport activities (Meuret, Broccolichi and Duru-Bellat 2001: 111-112). The *1989 Orientation Law* even provided the *collèges* with the right to modify and adapt the number of hours during which *major* subjects are taught (Combaz 1999).

ZEP-schools

Along with the first steps of decentralization, which charged the schools with the development of projects to reduce social inequality, the so-called “ZEP”-program was implemented in 1982 (Combaz 1996). “ZEP” stands for “education priority zones” (*zone d’éducation prioritaire*) and means districts with high rates of “disadvantaged” families. Mostly primary schools and lower secondary schools (*collèges*) have the ZEP-status; only very few upper secondary schools (*lycées*) are in the program. The goal of the ZEP-program is to provide “disadvantaged” schools with autonomy and resources to develop and implement specific teaching strategies to reduce social inequality. The exact criteria that determine whether a school is assigned to the ZEP-program are unknown; the authorities at the *académie*-level were supposed to designate schools with certain rates of unemployed parents, blue-collar workers, school dropouts, etc. (Bénabou, Kramarz and Prost 2009). ZEP-schools receive additional support by the state. Notably, they benefit from extra teaching hours and bonuses for the teachers and other school staff. 13 per cent of the students who entered lower secondary education in 1995 were enrolled in a ZEP-school (Caille 2001). Recent convincing evidence indicates that the program does not improve students’ school achievement and, hence, does not achieve its goals (Bénabou, Kramarz and Prost 2009).

According to teachers in ZEP-schools, their classes are characterized by high rates of students with “very disadvantaged” backgrounds meaning they grow up with unemployed parents, with single-parents and in low-income families (Guillaume 2001). While there is no convincing evidence for the effectiveness of the ZEP-program regarding students’ school performance (Bénabou, Kramarz and Prost 2009; Meuret 1994), students who spend their whole lower secondary education in a ZEP-school were found to be less likely to repeat grades and, holding constant students’ social origin and marks, students in ZEPs have higher chances to have their school track demand accepted by the staff meeting (Caille 2001). However, when social origin is not controlled, ZEP-students are more likely to attend the vocational upper secondary track than students in common public schools (Stefanou 2001). The staff considerably differs as compared to other public and private schools: the teachers tend to be younger and slightly of lower social origin, they have a different teaching style and closer relations to their students’ parents (Chauveau 2001; Emin et al. 2001; Guillaume 2001).

Private schools

Another school type that is prevalent in France is the private school.¹⁹ From the 1980s on, around 40 per cent of the students have attended at least one grade in a private school during their secondary education; almost one third of the students changed the sector at least once (Caille 2004; Langouët and Léger 2000). 95 per cent of the private schools are catholic schools (Brauns 1998: 74; Héran 1996). Since 1959 private schools are closely bounded to the state and can choose between two types of contract: Either they opt for the more restrictive “*contrat d’association*”, which implies that the school’s staff is paid with public funds and, in return, the school’s time schedule and teaching program has to follow the official standards or they choose the looser “*contrat simple*”, which implies only a limited funding of the staff and requires less compliance regarding the national pedagogical standards (Caille 2004). The former contract is by far the most common. French private schools are rather “para-private”: the only main differences between private and public schools are teacher selection and the organization of additional activities that the families have to pay for (Héran 1996). In private schools, headmasters select teachers. Apart from that, the school staff has the same diplomas as the teachers in public education. The religious background usually has not a very visible impact: Most headmasters and teachers are not religious and catechesis is only an optional course. Families enroll their poorly performing children in private schools to give them the chance to improve; religious education plays no important role in most parents’ decision-

¹⁹ See Langouët and Léger (1991, 2000) as comprehensive and important work on private schools in France.

making (Langouët and Leger 2000). As regularly indicated by quantitative studies, families from higher social classes and self-employed are more likely to make use of private schooling (Caille 2004). Moreover, there are large differences between *academiés* in the general provision of private schooling. Monthly fees for private secondary schooling range from 150 to 600 euros depending on whether a student is attending a boarding school, for instance.²⁰

Since French families have the freedom to choose schools they are not locally assigned to and school choice is strongly influenced by family's social origin, public and private schools differ with regard to their social distribution (Héran 1996; Meuret, Broccolichi and Duru-Bellat 2001; Tavan 2004a; Tavan 2004b). Students who spend all of their secondary education in a private school perform somewhat better in upper secondary school than students who attend public secondary schools (Caille 2004). Holding constant performance and family characteristics, students enrolled in private schools have similar chances as students in public schools to be admitted to the general track, but they are more likely to repeat grades (Caille 2004; Nauze-Fichet 2004; Tavan 2004a; Tavan 2004b). Furthermore, the literature indicates lower social class differentials in grade repetition in private as compared to public secondary schools (Tavan 2004a; Tavan 2004b). Finally, parents who enroll their children in private schools have higher educational aspirations and are more involved in school than parents whose children attend public schools (Caille 2004; Tavan 2004b).

²⁰ <http://www.allo-education.fr/etablisements/college-prive/tarif-des-colleges-prives.html>.

3 A cultural and a rational action approach to social inequality in education

This chapter presents and discusses two prominent approaches to social inequality in educational attainment. The “cultural approach” is based on Bourdieu and Passeron’s theory on “social reproduction via cultural reproduction” (esp. Bourdieu 1966; Bourdieu and Passeron 1964; 1970). This approach includes numerous empirical studies that use the concept of cultural capital to explain the association between social origin and school success (De Graaf, De Graaf and Kraaykamp 2000; DiMaggio 1982; Sullivan 2001 as some most prominent and important examples). Bourdieu’s original theory and subsequent research based on it are harshly criticized. However, some promising suggestions for refining it were made as well (see the suggestion by Lareau and Weininger 2003). Among the various theories on educational decision-making which can be assigned to a “rational action approach” or “RAT-approach” to social inequality in education, I focus on seminal theoretical models that have their roots in Boudon’s (1974) application of RAT to educational decision-making of students and parents: The model by Erikson and Jonsson (1996) and the model by Breen and Goldthorpe (1997; Goldthorpe 1996b). Despite critique of these theories and of the utilization of RAT in general, they appear to be powerful approaches to explain social class differentials within the institutionalized dialogue between family and school.

The aim of this chapter is to provide an introduction to the two prominent theoretical movements and, thereby, to present the theoretical foundations of the model on families’ and teachers’ decision-making within the institutionalized dialogue that will be developed in Chapter 5. While the main foundation of this model is clearly the RAT-approach, a selected argument of the cultural approach will play a key role in the model. This argument comes from Lareau and Weininger (2003) who suggest applying the concept of cultural capital in analyses of *family-school interactions*. As will be outlined in detail below, they assume that social classes differ with regard to cultural resources such as knowledge of the educational system, linguistic abilities and confidence in dealing with school staff and therefore parents from different classes cannot equally meet standards that schools define. Such standards are for instance attendance at parent-teacher meetings or other forms of parental involvement. As a consequence, teachers treat students from different social classes differently and social class differences in various school outcomes emerge.

Both approaches are evaluated in the light of one part of this dissertations' research question: How do families make decisions within the institutionalized dialogue? And, which additional mechanisms due to the specific institutional context of the dialogue could contribute to the generation of social class differences in the families' choices? Hence, in this chapter, I mostly focus on families' decision-making and discuss theoretical arguments that implicate effects of certain institutional conditions on families' educational decision-making. Teachers' decision-making will be addressed in Chapter 4.

After summarizing the main arguments of Bourdieu and Passeron's theory and presenting the cultural capital literature that arose from it, I will outline the theoretical suggestion on cultural capital in family-school-interactions and previous research on parental involvement in school. With regard to the presentation of the RAT-approach, I will start with a short outline of the general principles of rational action theory and varieties of it. Subsequently, I will present the seminal theoretical models of Boudon (1974), Erikson and Jonsson (1996) and Breen and Goldthorpe (1997; Goldthorpe 1996b) and some other relevant RAT-approaches to educational decision-making. The chapter ends with summaries of critique of the two approaches, their benefits and possibilities to integrate them. The last sections evaluate both approaches and conclude.

3.1 Social reproduction and cultural capital

3.1.1 THE THEORY OF BOURDIEU AND PASSERON

Bourdieu and Passeron's theory on "social reproduction via cultural reproduction" (esp. Bourdieu 1966; Bourdieu and Passeron 1964; 1970) was developed in a time when research was preliminarily required to detect the detailed processes that link student social characteristics to their educational performance without referring only to class differences in economic resources (Goldthorpe 2007a: 84). As Bourdieu and Passeron argued that *cultural* differences between classes caused social class differentials in student's school achievement, they lined up with other seminal works such as that of Bernstein (1961; 1965) on class differences in linguistic "codes" learned at home. For this reason, their arguments were notably applied to the association between social origin and educational achievement. However, Bourdieu and Passeron actually aimed to explain more than this association: They wanted to develop an encompassing theory on social reproduction (Goldthorpe 2007a; Lamont and Lareau 1988).

It is mainly Bourdieu and Passeron's work "*les héritiers, les étudiants et la culture*" (1964) that initially advanced their arguments on the role of the educational system within social reproduction. In this contribution, Bourdieu and Passeron present quantitative and qualitative evidence for a strong relationship between social origin and access to university studies in France (1964: 13).²¹ In addition, they provide evidence for the association between social origin and student traits such as cultural leisure activities, family resources and attitudes towards education. They argue that social stratification in university studies is persisting – regardless of reforms that aim to augment equality of opportunity – because the rigid educational system deliberately privileges students of favorable social background (see also Bourdieu and Passeron 1970: e.g. 194-195, 202, 205). Following the interests of the dominant social classes, schools exclude children from lower social classes and thus foster social reproduction (Bourdieu and Passeron 1970: e.g. 36-41, 50).

More specifically, children from the dominant social classes enter school with cultural and social abilities and habits (i.e. the well-known concepts *cultural capital* and *habitus* that will be addressed in more detail below) that children from the working class and the lower classes do not have. In school, children from less favorable classes have to acquire – with the utmost effort – competencies, behaviors and knowledge to overcome their lack of key cultural and social resources (e.g., Bourdieu 1966: 334; Bourdieu and Passeron 1964: 39-40). Although they can attain these resources during education, they can never achieve the natural familiarity of children from the higher classes and will be disadvantaged for that reason (Bourdieu 1976: 225; Bourdieu and Passeron 1964: 32-35). Basically, as the following quotation summarizes, social reproduction follows from the *distance* between the culture of the different classes and the culture of the school (see also e.g., Bourdieu 1966: 338; 1976: 226; Bourdieu and Passeron 1964: 39-40, 113; 1970: 177):

“To think that all have equal chances to attain the highest education and highest culture by assuring the same economic means to all those who have the indispensable ‘gifts’ [i.e. talents], is to remain halfway in the analysis of the obstacles and to ignore that the abilities measured by school criteria depend, more than on natural ‘gifts’ ([...]), on a more or less strong affinity

²¹ Another important and famous work of Bourdieu in which he outlines fundamental arguments of his theory is "*la distinction*" from 1979. This book is more concerned with the distribution and *manifestation* of cultural capital and other forms of capital over “adult” social classes than with the links between students’ social origin, the school system, students’ school performance and their educational attainment. As it deals with the means that higher social classes use to maintain their privileged social position, it does, of course, address the core arguments on social inequality in education. However, the main purpose of the work is to develop a theory on social class differences in *tastes* and *life-styles*.

Generally, this chapter does not have the ambitious goal to review *all* of Bourdieu's works, his colleagues and successors. Instead, I focus on contributions that emphasize the arguments that are relevant in view of the research topics of this dissertation.

between the cultural habits of one class and the requirements of the school system or the criteria that define [educational] success” (Bourdieu and Passeron 1964: 37).²²

Social reproduction is itself *legitimized* because ability or “gifts” – and not cultural and social resources acquired in the family – are generally expected to determine academic achievement and, hence, academic standards are not supposed to put lower class children at a disadvantage (Bourdieu 1966: 336-337; Bourdieu and Passeron 1964: 104-109; 1970: 198-201). Put another way, the exclusion of children from lower classes appears to be legitimate and is generally accepted because schools are thought to be relatively autonomous and to reward achievement that can be generated only by schooling and not by socialization in the family. The “double-dealing” of the educational system is further legitimized since no one – regardless of their social origin – is aware of it; it is generally unknown and overlooked (e.g. Bourdieu and Passeron 1964: 103, 109; 1970: 53).

Besides, Bourdieu and Passeron argue that the legitimization of the exclusion of children with low social background is reinforced by the fact that they eliminate themselves (Bourdieu 1966; Bourdieu and Passeron 1964: 94-95, 107-109; Bourdieu and Passeron 1970: 188-193). Families from lower classes send their children to lower school tracks or let them drop out of school because they have certain typically lower-class attitudes towards education. Moreover, families from lower classes do so because they “collectively underestimate” the actual abilities of their children. Further, as lower-class families recognize that they are not capable of succeeding in school, they devalue school and education in general and accept their exclusion from the educational system without protest.

With their approach to the processes that drive the intergenerational reproduction of social stratification, Bourdieu and Passeron introduced the concept of *cultural capital*. Throughout their work the concept of cultural capital embraces diverse forms of class-specific behaviors, attitudes, preferences and goods. The review by Lamont and Lareau (1988: 155) shows that the concept ranges from informal knowledge about the school, traditional humanist culture, linguistic abilities and styles over general knowledge, previous academic attainment and linguistic aptitudes to “tastes” that are mobilized for social selection. In a comprehensive chapter on economic, cultural and social capital, Bourdieu (1983) differentiates cultural capital into *embodied* cultural capital, *institutionalized* cultural capital and *objectified* cultural capital (see also Bourdieu 1997). The first form, *embodied cultural*

²² Own translation.

capital, comprises most of the before mentioned cultural attitudes, preferences, knowledge and competencies. It is needed to attain educational success. The second form, *institutionalized cultural capital*, corresponds to educational credentials and the third form, *objectified cultural capital*, involves objects that can be used, consumed and “understood” only with incorporated cultural capital, e.g. paintings, music instruments, books.²³

Most notably, Bourdieu (1983) outlines in this contribution how the dominant classes accumulate and monopolize economic, cultural and social capital in order to maintain their privileged position. One central process is the *institutionalization* of the different forms of capital: For instance, economic capital is institutionalized via property rights that, in turn, yield monetary returns; cultural capital is institutionalized through certificates that can lead to other certificates and to occupational positions that, in turn, yield economic capital. Another core argument of Bourdieu’s theory is lucidly explained in that work: Cultural capital is the key in social reproduction because of the specific ways in which it is *transmitted* and *converted*. Basically, all forms of capital can be transmitted between individuals and converted into one another and the transmission can occur via conversion. A simple example for a conversion of economic capital into objectified cultural capital is the purchase of paintings. However, while the transmission of economic capital can happen immediately and is visible, cultural capital is transferred through a lengthy, invisible and “discrete” process (Bourdieu 1983: 186-188; Bourdieu and Passeron 1964: 34). The core transmission of capital, in particular of cultural capital, occurs within and through the family and, therefore, drives social reproduction. The “invisibility” of the transmission is another aspect that supports the legitimization of social reproduction through cultural reproduction. Bourdieu himself states that:

“The most important and (at school) effective part of cultural heritage, [...], is transmitted in osmotic ways, even without any methodical effort and any manifest action, what contributes to reinforce the belief of the members of the cultivated classes [the dominant classes] that this knowledge, these abilities and attitudes that do not appear to them as the result of a learning [at home] are due to their gifts [i.e. talents]” (Bourdieu 1966: 330).²⁴

More generally, he argues that the visible transmission of power, e.g. through the transmission of economic capital, is publicly criticized and that, for this reason, other ways to transfer power from one generation to another have to be found (Bourdieu 1983: 198). The

²³ In “*la distinction*”, Bourdieu (1979) also uses the term “school capital” (*capital scolaire*) when he speaks of educational credentials.

²⁴ Own translation.

educational system appears to be an ideal institution to cheaply convert embodied cultural capital into institutionalized one, which provides access to privileged occupational positions.

Lastly, Bourdieu's well-known concept of the *habitus* appears when he considers the transmission of embodied cultural capital from parents to their children. "Embodied capital is a possession that has become an inherent part of a 'person', a habitus; 'to have' has turned into 'to be'" (Bourdieu 1983: 187).²⁵ In fact, embodied cultural capital appears to be the habitus itself. The habitus is a system of socially constituted dispositions that the individual acquires, most effectively in early life, and that determines his or her entire orientation to the world and modes of conduct within it (Goldthorpe 2007a: 87). As explained before, it is transmitted from parents to children through "secret" channels and, for this reason, the transmission of (embodied) cultural capital is more secure and irreversible compared to economic capital for instance. According to Bourdieu and Passeron the habitus is "the principle that produces the most durable educational and social differences" (Bourdieu and Passeron 1964: 198). One main critique of the work of Bourdieu (and Passeron) is its lack of clarity and precision regarding the mechanisms through which cultural capital is transmitted from parents to their children (e.g. Lamont and Lareau 1988). This point of criticism is outlined again at the end of this chapter, together with other critique of Bourdieu's original theory.

Families' decision-making

In the following sections, I briefly outline Bourdieu and Passeron's arguments on the generation of social class differences in families' educational decision-making. Bourdieu and Passeron are concerned with educational decisions such as choosing a certain school track, university studies or drop out from the educational system. They also address the secondary effects, but without using this label, of course: Bourdieu refers to early studies that find important social origin effects on school track choices that remain after controlling for students' school performance (Bourdieu 1966 cites: Clerc 1964; Girard and Bastide 1963). When trying to explain this *net* social class effect, Bourdieu indicates that he does not perceive it as reflection of the "will of the parents" (Bourdieu 1966: 330). His general argument is rather that the decisions of the families are *unconsciously* determined by the objective chances of educational success that members of the same social class have. As one's education determines one's occupation, families' decisions are therefore affected also by the objective chances of attaining prestigious occupational and class positions of their own social

²⁵ Own translation.

class. By saying that “the members of the middle and lower classes take reality for their will” (Bourdieu 1966: 331), he indicates again that lower-class families have internalized their social fate and do not question it; instead, they act in accordance with this fate.

In the passages that deal with “self-elimination” of students from lower classes, Bourdieu and Passeron argue:

“[...] every single action of choice through which a child excludes him- or herself from the access to an educational path [...] is based on the entirety of objective relationships [...] between his or her social class and the educational system [...]. This is why the structure of the objective chances of upward social mobility depending on social origin and, more precisely, the structure of chances of upward social mobility through the School [capital letter in original], determines attitudes towards School and [towards] upward social mobility through the School, attitudes that, in turn, contribute in a determining manner to the definition of the chances to attain to School, to agree with its norms and to succeed there, thus, the chances to move upward socially” (1970: 189-190, see also Bourdieu 1966: 332).²⁶

At first sight, this excerpt seems confusing; still it is a good example for the line of arguments that Bourdieu and Passeron conduct to explain social class differentials in educational decisions: the decisions of students and their parents are determined by the *objective* chances of members of their own social class to experience upward social mobility through education. These objective chances have been internalized by the family members and affect their “subjective hopes”, their attitudes towards education and towards social mobility through education.

Parents transmit such attitudes to their children and – partly as a consequence – children experience failure in school and further internalize these objective chances (Bourdieu 1966: 332-333). Their failure in school indicates to them that they have the same low chances as other students from the same unfavorable social classes. Students (and their parents) get to know these objective probabilities through their results in school and the advices that the school staff gives to them; these advices may be “biased” by the teachers since these may – consciously or unconsciously – take into account student’s social origin (Bourdieu 1966: 331). Bourdieu further relies on arguments of theories from social psychology to emphasize – somewhat inconsistently – that it is the experience of success and failure that forms

²⁶ Own translation.

aspirations and that the ideals and actions of individuals depend on the group they belong to and on the goals and expectations of that group.²⁷

In sum, it appears that Bourdieu and Passeron's theory explains social class differentials in families' educational decisions through *social class differences in attitudes towards education and towards social mobility through education* (see also Bourdieu and Passeron 1964: 38). With regard to the generation of these class-specific attitudes, Bourdieu and Passeron seem to argue that there are two stages: First, parents transmit to their children attitudes towards education, attitudes towards social mobility through education and thereby their "knowledge" and experience of class-specific objective chances of success. Second, children's attitudes are reinforced through their individual experience of success and failure within the educational system and the success and failure of other members of the same social class.

Policy and other implications of Bourdieu and Passeron's work

Bourdieu and Passeron's book "*les héritiers*" was published at the beginning of the 1960s when French politics and public were debating on social inequality in education (Masson 2001; Prost 2001). Its findings were in line with the results of studies that had been commissioned by the government and therefore further promoted reforms such as postponing the main selection of students into general and vocational tracks to the end of grade 9 and implementing the comprehensive secondary school named "*Collège d'enseignement secondaire*". On the one hand, Bourdieu and Passeron's work fitted in the general French "passion for equality" inherited from the Revolution in 1789; on the other hand, professionals and intellectuals involved in the educational process (e.g. teacher unions) rejected it and evaluated it as too pessimistic and deterministic (Van Zanten 2005: 676-677). Moreover, teachers' belief in their work's quality and the power of school to reduced social inequality was disturbed and students failing in school were encouraged to make school responsible for their defeat (Martucelli 2002 cited in Van Zanten 2005).

²⁷ When addressing social class and gender differences in students' learning behavior and choices of field of study, Bourdieu and Passeron (1964: 89-90, 94-95) hint at the role of *objective chances*: They emphasize that the behavior and the choices of students from lower social classes and those of girls are affected by their *uncertainty* about their professional future. Since students from less favorable classes cannot be sure to attain higher "intellectual" positions, they choose more vocational fields of studies that promise a specific occupational future. By contrast, students from higher social classes are more confident about their future, as they experienced success in school already and can – most importantly – rely on the resources of their family. Thus, they are more likely to choose "humanistic" disciplines with vague professional prospects.

In view of the context in which Bourdieu and Passeron's (1964) work became known and the subsequent reforms of the educational system, it is probable that teachers (and headmasters) are sensitive to social inequality in education. In his recent works, Bourdieu recognizes that the general acceptance of differences in educational success being caused by "talents" or "gifts" has weakened (Nash 2003: 445-446). In particular, he suggests that teachers have now a different view on students' performance since they are aware of the association between social class and educational outcomes (Bourdieu 1999: 442). Indeed, a study by Meuret and Alluin (1998) showed that most teachers think that the educational system does not make enough effort to reduce inequality of educational opportunity and that inequality has remained stable over the last decades. At the same time, they found that around one quarter of them supports an educational system that compensates for disadvantages of certain student groups – e.g. through more and better teaching – while 70 per cent have the opinion that all students should have teachers of same "quality". According to these findings, it appears that teachers are aware of social inequality in education but that this does not necessarily mean that they take care of it when making evaluations and decisions or even favor "positive discrimination". Furthermore, given that social inequality in education is a sensitive topic in France, social desirability may have affected teachers' answers.²⁸

3.1.2 CULTURAL CAPITAL LITERATURE

Bourdieu and Passeron's theory and particularly their concept of cultural capital became popular in the 1980s. Since then numerous studies on social inequality in different school outcomes have tested hypotheses derived from Bourdieu and Passeron's theory. Possibly as a consequence of Bourdieu's diverse conceptualization, researchers have defined and operationalized the concept of *cultural capital* in a variety of ways. The essence of the definitions presented in these empirical studies seems to be "familiarity with the dominant culture" embracing linguistic and social skills, general knowledge and the competencies to understand and appreciate arts (e.g. Aschaffenburg and Maas 1997; Becker 2010; De Graaf, De Graaf and Kraaykamp 2000; Dumais 2002; Jungbauer-Gans 2004; Sullivan 2001; Van deWerfhorst and Hofstede 2007). Another prominent definition is that by Lamont and Lareau (1988: 156) who carefully reviewed and condensed Bourdieu's descriptions and arguments to

²⁸ In his recent work, Bourdieu seems to have undergone a certain change: he recognizes that the general acceptance of differences in educational success being caused by "talents" or "gifts" has weakened (Nash 2003: 445-446). In particular, he suggests that teachers have now a different view on students' performance since they are aware of the association between social class and educational outcomes (Bourdieu 1999: 442).

“institutionalized, i.e., widely shared, high status cultural signals (attitudes, preferences, formal knowledge, behaviors, goods and credentials) used for social and cultural exclusion”. This definition is widely acknowledged and directly employed in several studies (e.g. De Graaf, De Graaf and Kraaykamp 2000; Kalmijn and Kraaykamp 1996; Roscigno and Ainsworth-Darnell 1999).

With regard to the operationalization of cultural capital, a wide range of measures has been applied: Parent’s educational attainment (e.g. Robins and Garnier 1985), parent’s and child’s highbrow cultural activities such as attendance at classical concerts, visits to museums and taking music lessons (e.g. Aschaffenburg and Maas 1997; De Graaf, De Graaf and Kraaykamp 2000; DiMaggio 1982; DiMaggio and Mohr 1985; Dumais 2002; Jungbauer-Gans 2004; Katsillis and Rubinson 1990), parent’s and child’s reading behavior (e.g. Aschaffenburg and Maas 1997; Crook 1997; De Graaf, De Graaf and Kraaykamp 2000; De Graaf 1988), parent’s interest in philosophy and politics (De Graaf 1988), number of books at home (e.g. De Graaf 1988; Jungbauer-Gans 2004; Roscigno and Ainsworth-Darnell 1999), availability of other educational resources such as dictionaries, newspapers and a quiet place to study (e.g. Jæger 2009b; Roscigno and Ainsworth-Darnell 1999; Teachman 1987), and measures of cultural knowledge, e.g., names of painters, writers, scientists (e.g. Becker 2010; Sullivan 2001). In addition, the attempt was made to operationalize the concept of *habitus* through students’ occupational expectations (Dumais 2002; McClelland 1990).²⁹

In their works, Bourdieu and Passeron give a few – sometimes rather indirect – hints for the measurement of cultural capital. For instance, to properly measure the *embodied* cultural capital of an individual, Bourdieu argues that “duration of education” including number of schooling years plus socialization within the family should be used (Bourdieu 1983: 186-187). The socialization within the family should be taken into account in terms of the *cultural distance* between the education received at home and the requirements of the school system. That is to say, when measuring an individual’s cultural capital, number of schooling years and social origin should be considered. Bourdieu (1966: 326) also suggests using educational attainment of mother and father and general level of cultural knowledge prevailing in the family. The idea behind considering the educational level of both parents is that the general level of cultural knowledge in a family is different when mother and father do not have the

²⁹ Not all of cited studies explicitly operationalize “cultural capital”: Notably, although they mention Bourdieu, Teachman (1987) speaks of “educational resources” and De Graaf (1988) of “cultural resources”. However, I still assign such studies to cultural capital literature as they are cited by contributions that *do* explicitly analyze the effects of cultural capital and of the arguments of the original theory.

same degree. In sum, Bourdieu's suggestions are quite vague and, hence, they tempt to use "whatever" available variable seems appropriate.

In cultural capital literature, the typical hypothesis that is derived from the original theory is that the effect of social class on educational attainment is *mediated* by cultural capital. To further explain this relationship, the authors refer to Bourdieu's notion of the similarity between the culture of higher social classes (or "dominant" classes) and school's culture. Putting the same argument differently, they refer to schools' "rewarding" of abilities and behaviors that are typical for higher social classes. When it became apparent that different measures of cultural capital have different effects depending on which country was analyzed, two competing theoretical mechanisms were developed: Referring to Crook (1997), the argument was that in some countries highbrow activities have an impact on educational success because they indicate a student's social class position, while in other countries "cultural activities" such as reading behavior and the availability of books and other learning material have an impact because they promote students' cognitive skills and abilities and these translate into good examination results and marks (see also Dumais 2002; Sullivan 2001; Swartz 1997).

The early studies also advanced hypotheses that deal with interactions of social origin and cultural capital: DiMaggio (1982) argued that "cultural reproduction theory" yields that cultural capital has even stronger effects for higher class students than for lower class students and suggested the competing "cultural mobility model" which, by contrast, assumes that students of lower social origin benefit more from (later acquired) cultural capital than students from higher classes. Other resembling assumptions – not derived from Bourdieu – were presented in early contributions: parents' cultural capital is more beneficial in students' early school career and students' own cultural capital becomes more relevant in their later educational career; parents' and children's cultural capital accumulate and have independent effects (e.g. Aschaffenburg and Maas 1997; De Graaf 1986; Teachman 1987). Finally, in more recent studies, the link between social class and educational success is disentangled into complementing assumptions such as (i) parents must have cultural capital, (ii) parents must transmit their cultural capital to their children, and (iii) children must transform their cultural capital into educational success (Jæger 2009b; see also Sullivan 2001).

Cultural capital literature provides empirical findings that are ambiguous with regard to their support of the original theory or, at least, of the hypothesis it derives from it. The results seem to vary because of the diverse operationalization of cultural capital (Dumais 2002;

Sullivan 2001), but also because different dependent variables (test scores, marks, years of schooling, educational choices) and groups of explanatory variables are analyzed. Most of the studies find positive effects of cultural capital on different educational outcomes, whereby, when several different measures (e.g. highbrow activities and reading behavior) are analyzed simultaneously, some measures have greater effects than others (Aschaffenburg and Maas 1997; De Graaf et al. 2000; Sullivan 2001). Again, one explanation is that educational systems vary with regard to the type of cultural capital they “reward”. It is concluded that, for instance, in the U.S., the Netherlands and Britain, where standardized examinations play an important role, reading behavior and educational resources in the home have a greater effect than highbrow activities (see also Katsilis and Rubinson for Greece and, contradicting evidence by Jaeger (2009b) for Denmark where “cultural signals” are supposed to have the greater effect).

With regard to cultural capital’s mediating of the effect of social origin on educational attainment, many studies provide supporting evidence (De Graaf 1988; De Graaf, De Graaf and Kraaykamp 2000; Kalmijn and Kraaykamp 1996; Jaeger 2009b; Roscigno and Ainsworth-Darnell 1999; Sullivan 2001; Van de Werfhorst and Hofstede 2007) and fewer do not (DiMaggio 1982; Katsilis and Rubinson 1990; Robinson and Garnier 1985). Findings with regard to DiMaggio’s “cultural mobility model” and Bourdieu’s “cultural reproduction theory”, which predict a negative respectively a positive interaction of social origin and cultural capital, are ambiguous but still slightly more in favor of Bourdieu: For instance, DiMaggio’s (1982) study finds a positive interaction for women (but a negative for men); De Graaf, De Graaf and Kraaykamp (2000) find that especially lower-class children benefit from reading behavior; Aschaffenburg and Maas (1997) show a positive interaction of class and parent’s cultural capital on the most important school transition in the Netherlands and Roscigno and Ainsworth-Darnell (1999) do so for marks and test-scores. Against ideas that are deduced from Bourdieu’s original theory, the findings of several studies support the assumptions that parent’s cultural capital has a stronger effect on student’s early school career and that parents’ and student’s cultural capital do *accumulate* and have independent effects (Aschaffenburg and Maas 1997; De Graaf 1986; Teachman 1987).

Critique of cultural capital literature

Cultural capital literature is criticized for several reasons. As the critique is not referring to Bourdieu’s original work but rather to the application and interpretation of it, I present the critique of cultural capital studies in this section and not together with general critique of

Bourdieu and Passeron's original theory at the end of this chapter. One point of criticism is the great variety of definitions and measurements of cultural capital. Already in 1988, when work dealing with cultural capital was still in the early stages, Lamont and Lareau argued that the concept was used with plenty of different and, sometimes even contradictory, meanings and that this variety entails the risk of confusion and of making the concept obsolete. Despite this early "warning", research applying the concept of cultural capital remained inconsistent (Goldthorpe 2007a; Kingston 2001; Lareau and Weininger 2003; see also brief overview in previous section).

Besides, it is argued that the cultural capital concept (and Bourdieu's other ideas) is only applicable to France (Kingston 2001; Lareau and Weininger 2003). Throughout their work, Bourdieu and Passeron occasionally indicate that their theory holds especially for the society and the educational system in France. They suggest, for instance, that the desire to attain the highest position within the hierarchical system of the university is particularly strong in France and therefore that social selection through cultural selection, i.e. through criteria that are defined by the school, is particularly well accepted there (Bourdieu and Passeron 1964: 106). They also emphasize that the role of exams is especially important and dominant in the French school and university system and they explicitly mention that "among all European educational systems" the French system is the one that puts most importance on exams (Bourdieu and Passeron 1970: 175, 169). Bourdieu and Passeron regularly point to the specific procedure of *selection* of students for the *Grandes Écoles*: examinations that require "general culture", meaning general knowledge including knowledge of history, literature, culture, politics, etc. (e.g. Bourdieu and Passeron 1970: 205).³⁰ However, I object that cultural capital literature has become more sensitive to specific national contexts as it employs *adapted* measures (e.g. reading behavior and resources in the home), analyzes detailed mechanisms (e.g. Jaeger 2009b; Sullivan 2001) and justifies why one or the other measure better "applies" to a specific country (e.g. Jaeger 2009b; Jungbauer-Gans 2004).

Another important point of criticism is that the theoretical understanding of Bourdieu in the cultural capital literature is not consistent with Bourdieu's original theory (Goldthorpe 2007a: 94). Critics see two main deviations: First, they argue that the differentiation between ability (measured in terms of standardized tests) and cultural capital is not in the sense of

³⁰ Generally, Bourdieu and Passeron do not state that their theory *cannot* be applied to other countries, but they outline specific aspects of the French system and society that support their assumptions or provide the context for the testing of their assumptions. Consequently, these specific aspects should exist in other countries when one wants to make use of their theory there.

Bourdieu's concept of cultural capital (Goldthorpe 2007a; Lareau and Weininger 2003). Typically, they say, the studies claim to test Bourdieu's arguments when they hold constant standardized test scores, observe a remaining social origin effect on school success (e.g. marks, diplomas) and, subsequently, take into account measures of cultural capital. However, as sustained by citations of Bourdieu and Passeron, Lareau and Weininger (2003) argue that cultural capital is supposed to be "irrevocably fused" with "skill" or "ability" and therefore distinguishing between them is not in line with Bourdieu's original theory. In his explications on the association between educational attainments and occupational positions, Bourdieu indicates that educational credentials simultaneously verify two types of competences: first, technical knowledge and, second, competences that are directly linked to social origin (Bourdieu and Passeron 1970: 217, 202-203). From this, critics deduce that the "effects of 'status' for Bourdieu are not distinct from those of 'skill' (or by extensions, 'ability')"

(Goldthorpe 2007a: 95; Lareau and Weininger 2003: 120).

The second deviation from Bourdieu's original ideas concerns the operationalization of cultural capital through highbrow cultural activities and attitudes. Critics refer to the original texts of Bourdieu that *could* be interpreted as incitement to measure cultural capital through interest in and performance of "highbrow" culture but that – when reading closer – actually do not (Lareau and Weininger 2003: 115-118). To the contrary, Bourdieu's works which are most clear about the concept of cultural capital and which provide some hints to the operationalization of it, nowhere mention indicators such as attendance and attitudes towards highbrow culture (esp. Bourdieu 1983: 186-190). Finally, critics say that, if at all, highbrow culture could be a signal of higher status groups *in France* (esp. Bourdieu 1979) but hardly in other countries (Kingston 2001: 90-91; Lareau and Weininger 2003: 117).

Despite this mostly understandable criticism, cultural capital literature provides relevant findings. Especially recent studies face up to some of the main points of criticism by refining and adapting the ideas of the original theory: The authors propose theoretical arguments on why and how cultural capital effects vary by educational system (e.g. Crook 1997), split up the concept into dimensions such as highbrow activities, cultural skills and abilities (e.g. De Graaf, De Graaf and Kraaykamp 2000), and try to detect the exact mechanisms that link social class, parents' and students' cultural capital, (teacher evaluations,) and educational outcomes (e.g. Jaeger 2009b; Sullivan 2001).

Considering the research topic of this thesis, notably studies that analyze effects of cultural capital on educational transitions and choices seem interesting. For example, De

Graaf (1988) finds for the Federal Republic of Germany that, holding constant marks, social class effects on the choice of secondary school are considerably reduced when parental cultural capital (reading environment at home) is taken into account. Also, Aschaffenburg and Maas (1997) show that parental cultural capital (highbrow activities) has stronger effects on early transitions and that these effects are even stronger for children from higher classes than for children of less favorable origin. Such results indicate that cultural resources of the parents – measured in direct or indirect ways – affect school track decisions and may contribute to a mechanism that explains social class differentials in families’ educational decision-making within a specific institutional context. Cautiously, one could argue for instance that De Graaf’s finding for Germany is operating through teacher recommendations: Teachers could take into account parents’ cultural capital (e.g. to evaluate parents’ capacity to support their child) and students’ cultural capital (that translates e.g. in participation in class) and therefore are more likely to recommend higher tracks to families with a lot of cultural capital. Hence, if families take into account teacher recommendations cultural capital affects their choices. The result of Aschaffenburg and Maas (1997) could indicate that parents from higher classes “make use of” their cultural capital to influence their children’s transitions to next educational levels. Since the most important transitions are at early educational stages and parents are more involved in children’s schooling when these are young, the cultural capital effects are strongest on early transitions.³¹

In view of this interpretation, the question comes up how parents’ cultural capital affects their involvement in school and whether social class differences in the “possession” of cultural capital cause social class differences in beneficial parental involvement, i.e. parental involvement that achieves preferable treatment by teachers and therefore higher school success. As mentioned above, Lareau and colleagues advance a theoretical suggestion on the role of cultural capital in family-school-interactions. The following subchapter outlines this suggestion.

3.1.3 CULTURAL CAPITAL IN FAMILY-SCHOOL INTERACTIONS

Some researcher who criticize cultural capital literature advance that certain ideas of the original work of Bourdieu and Passeron, in particular their concept of cultural capital, could

³¹ The assumption that parents’ involvement in their children’s schooling is stronger at early transitions can be derived from the *life-cycle hypothesis* (Müller and Karle 1993), which advances that social class effects are stronger at early transitions because parents have more influence and students are not emancipated from them. Even though there are arguments against stronger effects at early transitions, the argument that effects of parents’ own educational experience are stronger in early stages of students’ school careers seems uncontested (Hillmert and Jacob 2010).

be efficiently refined. In contrast to the fundamental opponents of Bourdieu's original theory who suggest putting the concept of cultural capital away, they see potential in the use of his ideas and concepts (Lamont and Lareau 1988). More specifically, they suggest making use of the concept of cultural capital in investigations of *family-school interactions* (Lareau and Weininger 2003).

The original theory provides no explicit arguments regarding parental participation in schooling but it emphasizes the importance of cultural capital in the communication between students, their parents and teachers (Lareau 1987). Lareau and Weininger (2003: 568) see potential in the original work and suggest refining "the micro-interactional processes through which individuals comply (or fail to comply) with the evaluative standards of dominant institutions such as schools". More specifically, they put forward the assumption that individuals strategically use *cultural resources* such as their knowledge, skills and competences in order to meet institutionalized standards of evaluation. In the school context, this implies that students make use of their cultural resources to get good marks and parents apply certain socially determined knowledge, skills and competences when communicating with the teachers in order to get preferable treatment for their children. In keeping with Bourdieu's concept of "capital", the authors propose that these cultural resources can be monopolized and transmitted between family members and across generations, and provide advantages or "profits".

Moreover, cultural capital is supposed to be strongly associated with social class. Adopting Bourdieu's notion of the similarity of the culture of certain classes and school's culture, Lareau and Weininger advance the assumption that certain classes impose evaluative criteria on the educational system (Lareau and Weininger 2003: 587-588). They rely on Bourdieu's "conflict-theoretical" idea, which states that higher social classes define and implement educational norms or evaluative criteria that are at most favorable for their own children. From arguments of that kind, Lareau and Weininger deduce that those classes who have not the power to impose educational standards are disadvantaged and that the standards, i.e. the cultural capital that is required in the educational system, is not fix over time. They argue that with the change of the conceptualization of children, the standards of child rearing and of interactions with "professionals and semi-professionals" (e.g. medical doctors, teachers) have changed. Today, parents are generally required to be "active", "involved", "assertive", "educated" and to act as "advocates" of their children (Lareau and Weininger 2003: 589).

Lareau and Weininger (2003: 589) suggest that empirical studies, document, firstly, which formal and, particularly, informal criteria the school staff uses to assesses the performance of students (and parents) and, secondly, whether students' and parents' equipment with cultural capital they can use to meet the requirements of the school staff varies with their social class position. Also, they suggest, research should investigate social class differences in parents' skills and knowledge to influence the standards. They label these mechanisms "dynamics" (Lareau and Weininger 2003: 588). The latter points yield the investigation of social class differentials in parents' communication with school staff and their involvement in their children's schooling (e.g. membership in parent associations, initiation of meetings with the school staff, participation in school events).

Qualitative and quantitative research on parental involvement in school provides findings that are in line with Lareau and Weininger's suggestion. Not all studies directly rely on Bourdieu or refer to the arguments of Lareau and her colleagues, but they all show which resources parents need and make us of in interactions with the school. Based on a review of psychological literature, Hoover-Dempsey and Sandler (1997) have developed a model on parent's shaping of their decision to become involved. They argue that three major constructs determine parent's involvement decision: *Role construction*, *self-efficacy* and invitations, demands and opportunities to get involved. Role construction implies that parents believe that they have to be involved. This belief is influenced by the expectations of significant others (e.g. the child, teachers, other parents) and the behavior of significant others. Self-efficacy represents parents' belief that they have the skills and ability to achieve goals such as improving their children's educational success and getting preferable treatment by teachers. Individuals with a high level of self-efficacy perceive difficult situations as challenges and try even harder while individuals with low levels try to avoid difficult situations (Bandura 1989a; Bandura 1989b). Invitations, demands and opportunities – the third construct – have a comparatively smaller effect. However, given certain combinations of role construction and self-efficacy, they considerably increase the likelihood that a parent becomes involved. For instance, if parents have a low self-efficacy but a high role construction, invitations by the school are supposed to have great positive impact.

The model by Hoover-Dempsey and Sandler (1997) yields that parents become involved when they think that they are required to, when they believe that they are equipped with resources that make them successful in dealing with teachers and when they are invited to be involved. Applying this assumption to the suggestion by Lareau and Weininger, parents become involved when "being involved" is a *standard* required by the school and when

parents believe that they have the *cultural capital* that is needed to meet these standards and, beyond that, to achieve goals such as improving of their children's achievement and educational outcomes. Invitations and opportunities contribute to standards' definition and hence to parents' evaluation of the "appropriateness" of their resources.

The formal standard is that *all* parents, regardless of their abilities and resources, should be more involved at home, e.g. through help with homework, and in school, e.g. through attendance at parents' evenings, meeting the teachers and volunteering at school events (Blackledge 2001; Crozier 1996; Reay 2005).³² As some qualitative research shows, the informal standard is to master the "middle-class white rules" which are, for instance, speaking the native language, reading stories to the children before they go to bed, practicing reading and vocabulary (Blackledge 2001: 365). Besides, teachers require the parents to respect their work, to actively contribute to the education of the children and not to leave the whole "education job" to the school (Blackledge 2001; Lareau and Horvat 1999).

Providing evidence for the theoretical ideas of Hoover-Dempsey and Sandler (1997) and Lareau and Weininger (2003), qualitative studies reveal that parents who think that they do not have the abilities and resources that enable them a successful dealing with the school staff are afraid of talking to the teachers (Blackledge 2001; Lareau and Horvat 1999; Reay 1999). Together with the results of quantitative studies, this research shows and argues that resources and abilities (i.e. cultural capital) that determine parents' – notably mother's – involvement in school are linguistic abilities (Blackledge 2001; Reay 1999), self-assurance (Lee and Bowen 2006; Reay 1999; 2005), trust in the educational system (Crozier 1996), informal and formal knowledge of the educational system (Crozier 1996; Lareau 1989; Masson 1997), the attitude that parents *should* be involved and support teachers' work (Reay 2005; Sheldon 2002) and social networks (Horvat, Weininger and Lareau 2003; Sheldon 2002). Furthermore, the literature mentions time and economic resources to account for costs (e.g. child care arrangements and transportation costs) that come up when parents want to go to school to meet the teachers (Griffith 1998; Guryan, Hurst, Kearney 2008; Hoover-Dempsey and Sandler 1997; Lareau and Horvat 1999; Reay 2005). With regard to school characteristics, a welcoming and empowering school climate positively affects parent's

³²An important part of the literature that is presented in the following deals with the case of the U.S. and Britain. Notably in Britain the government has more and more requested parental involvement in the last decades and, partly as a consequence of this, a lot of research on parental involvement has emerged. The following sections do not claim to give a full overview of the literature on this topic. They rather provide significant examples. One insightful review is that of Hoover-Dempsey et al. (2005).

involvement in the school (e.g. Griffith 1998 and studies presented in Hoover-Dempsey et al. 2005).

It was found that social class and socioeconomic status are considerably related to relevant abilities and resources and to involvement of different kinds. While British working-class mothers report that meeting teachers is a great psychological effort for them and that they don't feel "listened to", middle-class mothers show certainty and entitlement and communicate more criticism (Reay 1999). Parents with higher educational attainment find more efficient ways to cope with problems occurring with teachers (e.g. meet the teachers very regularly, mobilize other parents or 'professionals' in their personal network); in such situations lower educated parents do not intervene at all or act on their own (Lareau and Horvat 1999; Horvat, Weininger and Lareau 2003; Sheldon 2002). Generally, it appears that parents belonging to higher status and native groups possess the linguistic abilities and educational knowledge that enable them to be involved *in school*, while parents in less favorable social positions opt for involvement *at home* (e.g. Lee and Bowen 2006; Reay 2005). For French parents of students in lower secondary school, Caille (1992) shows that social classes differ with regard to membership in parent associations (PA), initiation of meetings with teachers and the likelihood of generally having met a teacher during the last school years. O'Prey's (2004) findings moreover link French parents' involvement with "classical" measures of students' cultural capital as she shows that more involved parents are more likely let their children attend school-external cultural activities such as music lessons. With international data on time use, Guryan, Hurst and Kearney (2008) show that higher educated parents spend more time on childcare including meetings with teachers than parents with lower educational attainments, even when employment-status is held constant. Sui-Chu and Willms (1996) only found small but significant effects of parents' socioeconomic status on their involvement in school. Still, they show that overall levels of parental involvement (e.g. attendance at school events, volunteering) are higher in schools with a high average socioeconomic status. This could be because in such schools the climate is better in terms of empowerment and the staff is more helpful and friendly (Griffith 1998; Hoover-Dempsey et al. 2005).

In the French institutional context, parental involvement is formally promoted and thereby defines standards (see Chapter 2). For instance, regular parents' evenings and informatory events signalize that parents are required to come to school regularly and to get informed about their children. Therefore, I assume that in France parents are "required" to be involved and will get preferable treatment by teachers if they meet these requirements. I

further assume that parents' cultural capital and their involvement play an important role because staff meetings make virtually binding secondary school track propositions: If parents want to have their school track request accepted, they may have higher chances if they are involved. Since the French institutional context puts emphasis on parental involvement, the theoretical suggestion on cultural capital in family-school-interactions appears to be appropriate to understand how families and the school staff make decisions within the institutionalized dialogue.

3.2 Rational action and status maintenance

Over the last decades more and more sociologists from diverse fields and from sociology of education and social mobility have decided to make use of Rational Action Theory (RAT)³³. Initially, RAT became prominent because sociology was seeking for theories that were powerful and concrete enough to *explain*, instead of only *describe* (Boudon 2003). Recently, its popularity has increased because it was shown to be successful in solving important questions regarding many core domains of sociology (Boudon 2003; Kroneberg and Kalter 2012).

RAT can roughly be defined as a theoretical approach to individual behavior that is based on the assumption that individuals form expectations about the consequences of alternatives that are available to them (Kroneberg and Kalter 2012). More specifically, individuals evaluate the costs and the benefits of these available alternatives and, based on this evaluation, they choose the alternative that best satisfies their preferences. An RAT generally consists of three components: First, the “starting point” are actors (most often individuals, sometimes firms, nations, organizations); second, these actors hold *resources* (or – negatively formulated – have to act under *constraints*), have *preferences* and have to choose among alternatives; third, a “decision rule” determines which action an actor will perform under given preferences and constraints (Diekmann and Voss 2004: 15; Kroneberg und Kalter 2012: 76).

Social sciences are generally interested in explaining regularities on the macro- or “societal”-level. For instance, the theoretical approaches presented in this chapter are concerned with explaining (trends in) the social stratification of education. Hence, the explanandum of these approaches is a social or macro-phenomenon, namely the “collective effect” of social class on educational attainment. RAT follows the postulate of

³³ It is also termed “Rational Choice Theory”.

methodological individualism, i.e. the method of explaining or describing phenomena or regularities on the macro-level as a result of the actions of individuals (e.g. Diekmann and Voss 2004; Esser 1999a: 96-98)³⁴ The application of methodological individualism requires assumptions of three types: First, *bridge* or *context-hypotheses* link the macro- to the micro-level. More specifically, they connect the specific social situation an actor is in with his goals, with his individual perception of available resources and alternatives and hence with his evaluation of subjective probabilities. In the following I also label them more generally “bridging hypotheses”. Second, *auxiliary assumptions* define how an actor assigns utility values to different available alternatives and hence which alternative he will choose (Brüderl 2004). Third, *rules of aggregation* link the micro-level again with the macro-level. They define how the actions of the individuals aggregate and “build” the explanandum, i.e. the social phenomenon or regularity that they shall explain (Esser 1999a: 96-98, Diekmann and Voss 2004). In sum, the three steps (macro-micro, micro-micro and micro-macro) lead to the explanation of the fourth element, namely the “collective explanandum”, social regularity or phenomenon on the macro-level (Esser 1999a: 96-98, Diekmann and Voss 2004: 21).

Early sociological RAT-approaches to educational decision-making are the seminal models by Gambetta (1987) and Boudon (1974). Following from Boudon’s theory, the well-known models by Breen and Goldthorpe (1997; Goldthorpe 1996b) and Erikson and Jonsson (1996) were developed more than two decades later (see also Esser 1999b). Recently, these models were refined (e.g. Becker 2000; Holm and Jæger 2008; Jaeger 2007) and different RAT-approaches based on *human capital theory* (e.g. Hillmert and Jacob 2003) or integrating psychological arguments (e.g. Morgan 1998; Morgan 2002) were developed. This subchapter presents Boudon’s approach and the models by Breen and Goldthorpe and Erikson and Jonsson. Moreover, it briefly addresses human capital theory, Gambetta’s theory and recent RAT-approaches providing arguments on the impact of institutional circumstances on educational choices.

³⁴ In fact, RAT variations with very strong rationality requirements are based on six postulates (see e.g. Boudon 2003). “Minimal” or weaker versions of RAT are characterized by three assumptions (Kalter und Kroneberg 2012): (i) individuals select from out of alternatives, (ii) individuals’ beliefs, preferences, and constraints determine their actions, and (iii) individuals choose the alternative that appears to them as optimal with regard to their beliefs, preferences, and constraints. The weaker versions neglect the assumption that “actors are optimally informed rational egoists who care only for the tangible consequences of their actions and take into account only objective constraints” (Kroneberg and Kalter 2012: 81). A well-known example for a narrow RAT is human capital theory (Becker 1993[1964]; Subchapter 3.2.4) and one for a wider RAT is Boudon’s *cognitivist model* (1996), which follows the notion of *subjective rationality*. According to Boudon’s model, individuals may act in line with beliefs that have been produced in their minds in perfectly sound ways but that, from the outside, appear to be mistaken.

3.2.1 BOUDON'S APPLICATION OF RAT TO EDUCATIONAL CHOICES

With Boudon's work from 1974 the terms of *primary and secondary effects of social stratification* became prominent (see also Girard and Bastide 1963). They are based on the idea that a "two-component process" generates inequality of educational opportunity (or social class differentials in educational attainment). The first component – the primary effects – consists in the relationship between social class and school achievement; the other component – the secondary effects – is the impact of social class on educational choices, even when school performance (and other factors) are held constant (Boudon 1974: 37).

Boudon's differentiation between the primary and secondary effects and his theoretical proposition for the explanation of the secondary effects follow from his review of different micro-sociological approaches to the intergenerational reproduction of educational inequality. He rejects the "value theory" (Hyman 1953), which explains that students from different social background vary with regard to their educational and occupational aspirations because social class shapes what young people perceive as social achievement (for instance, a job that suits one's personal interests as opposed to a well-paid and secure position). But he adopts the work by Keller and Zavalloni (1964) who argue that aspiration is a function of student's social origin, meaning that students from lower class who want to attain high educational and occupational levels have to "travel a longer social distance" (Boudon 1974: 23). From this notion, Boudon implies that "reaching a given educational level or a given status means being exposed to costs and benefits that are going to differ according to social background" (Boudon 1974: 23). Further, he addresses "cultural theory" which became prominent in the 1960s. This theory embraces the assumptions and findings of authors such as Coleman (1966), Jencks (1972) or Bernstein (1961) and the controversial above presented theory of Bourdieu and Passeron (1964, 1970). The "cultural theory" emphasize that skills and values that help children in school are unequally taught in families from different social classes and that the school system is not able to fulfill its function of compensating for these social inequalities in cultural resources. Boudon concludes that "neither the value theory nor the cultural theory gives a complete picture of the effects of social stratification" (1974: 24), but proposes that social differences in "cultural background", i.e. the core argument of "cultural theory", explain the primary effects (see also Erikson and Jonsson 1996; Van de Werfhorst and Hofstede 2007).

Boudon's separation of primary and secondary effects of social stratification is based on ideas of Keller and Zavalloni (1964; Boudon 1974: 29-31). In order to explain the secondary

effects, Boudon postulates that families from higher social classes attach higher benefits to the track that supposedly leads to higher social class positions. Besides, families associate monetary and social costs with the different educational tracks and their capacities to account for these costs depend on their social class. “Social costs” include psychological and socio-psychological consequences of social mobility. These imply, for instance, that students from higher social class suffer from not attending a higher school track because most of the student’s friends do; by the same token, attending that higher track is costly for a working-class student because none of his friends does so. Since families’ financial resources vary by social class, also differing monetary costs drive social class effects on families’ choices. Finally, the *utility* of choosing one track (rather than another) increases when the perceived costs that are attached to it decrease and the corresponding benefits increase. As a consequence of the association between social class and these costs and benefits, choosing one track rather than another is a function of family’s social class.

3.2.2 THE ERIKSON AND JONSSON-MODEL

Following Boudon (1974), Erikson and Jonsson (1996) differentiate between primary and secondary effects. However, as opposed to Boudon, they do not use this distinction to explain social inequalities in education, but as a “strategy of analyzing” them (Erikson and Jonsson 1996). Their seminal work from 1996 has the aim of finding out why the development of educational inequality is different in Sweden as opposed to most other European countries.³⁵ They provide assumptions and empirical results on general mechanisms that cause social class differentials in educational outcomes. They advance five explanations for the association between social class and “academic ability and performance”, i.e. the primary effects (Erikson and Jonsson 1996: 10). First, genetic factors account for a part of this association. However, relying on own empirical results, they emphasize that this part must be relatively small and hence that other factors must play a more important role. Second, they advance a “socialization-argument”: social class is related to academic ability because children’s home environment (in terms of parent-child interactions) has a considerable impact on their development. Third, they point at the distinction between “academic ability” and “school performance”, which is ignored in Boudon’s general theory: Social class differentials in children’s school performance (as opposed to their academic ability) may be reinforced by

³⁵ The well-known work by Blossfeld and Shavit (1993) showed that social inequality in educational attainment has persisted in most economically advanced countries except Sweden. Today, the state of research is that social inequality in educational attainment has decreased also in most other of these countries (Breen, Luijkx, Müller and Pollak 2009).

middle-class biases in teachers' *subjective* evaluations of their students' achievement. They do not suppose that teachers consciously discriminate against lower class children, but they expect that "teachers also tend to reward proper behaviors and adjustment to the 'cultural values' prevailing in school" (Erikson and Jonsson 1996: 11). Hence, when social class differentials in *subjective* achievement measures – e.g. marks – instead of *objective* measures – e.g. scores in standardized ability tests – are considered, the primary effects can be reinforced through teachers' grading behavior. Finally, they propose that, fourth, health and nutrition, and fifth, number of siblings contribute to the association between social class and academic ability. However, they object that thanks to improved general living conditions, health and nutrition may play a minor role today.

Erikson and Jonsson conclude that international differences in these five factors are not large enough to explain why educational inequality varies over countries. Hence, they move further and attempt to explain social class differentials in educational choices. In keeping with Boudon (and Becker 1993 [1964], they say), they generally assume that students and their parents rationally consider costs and benefits they associate with alternative educational courses. With regard to the benefits, students and their parents make rough estimates of the income and other working conditions of positions and occupations the different educational tracks supposedly will lead to. As opposed to the assumptions of economic theory, individuals are not capable of taking into account "lifetime earnings". Further, individuals consider the benefit of following the chosen educational track itself (e.g. joy of general learning, meeting peers with the same attitudes and interests). As to the costs, Erikson and Jonsson suggest that these include monetary charges but psychological burdens as well. They denote the benefits with B and the costs with C . Moreover, they introduce the parameter P , which represents the probability that the student successfully completes the chosen educational course ("likelihood of success"). The estimated utility of a certain course is then $U=PB-C$ (Erikson and Jonsson 1996: 14). Students and their parents roughly estimate the utility of every alternative they have, rank these utilities and choose the alternative that promises the highest utility.

In a next step, Erikson and Jonsson outline whether and how social class differences in economic, cultural and social resources as well as aspirations may cause social class differentials in educational choices. That is to say, they define the "bridging hypotheses". Due to the costs of schooling, families' economic background has an effect on the child's likelihood of transition to different educational tracks (Erikson and Jonsson 1996: 17-22). Family's economic circumstances contribute to the generation of social class differentials in their decisions via two mechanisms: First, since families from higher social classes tend to be

better equipped than families of lower social status, they can more easily bear the costs of schooling. Second, variations and interruptions of parents' earnings (e.g. because of periods of unemployment) or their sensation of an increased risk of job loss have a negative influence on their evaluation of their economic possibilities, too. Relying on empirical results, the authors conclude that economic background is not a major factor driving the social class effect on educational decisions.

With regard to the role of cultural and educational resources in educational decision-making, they suggest that social class differences in culture and life-styles have an impact on students' evaluation of the benefits of different educational courses. They posit that "[...] higher classes reap more benefits from higher education because the consumption value of such education is high for them – in short, they like being in school better" (Erikson and Jonsson 1996: 22). This argument, they say, is based upon a weaker interpretation of the strict conflict-theoretical ideas of Bourdieu (1977) and on literature dealing with "status cultures" (Bourdieu 1979; Collins 1971). Moreover, they emphasize the impact of social class differences in families' knowledge about the school system. Since parents from higher social classes have higher educational degrees, they know for instance which school tracks lead to prestigious, well-paid and secure occupations and positions or which choices constraint the subsequent attendance of other educational courses. Higher-class families have also more informal but highly relevant knowledge such as "that you do not have to be particularly clever to succeed at university" (Erikson and Jonsson 1996: 23). This type of cultural resources enables families of higher social status to give accurate advices to their children on crucial decisions along their educational career. Further, they address empirical literature on trends in educational inequality and infer that – in strong opposition to the arguments of Bourdieu – class differences in cultural resources in terms of "status culture" are not the reason why in some industrial countries inequality has persisted and in others, such as Sweden, it has decreased. They rather believe that social class variations regarding the (informal) knowledge about the school system have become increasingly important and can, due to the varying complexity of educational systems, account for international differences in the development of educational inequality.

Erikson and Jonsson (1996: 27-30) propose that, apart from social class differences in economic, cultural and educational resources, social origin effects on educational choices are generated by social class differentials in educational and occupational aspirations. In accordance with Keller and Zavalloni (1964) and Boudon (1974), the benefit a student attaches to a certain educational track depends on whether the track will lead to the degree or

occupation that corresponds to his parents' social status. Therefore, regardless of their social background, students may have the same (relative) level of aspiration, but as they start from different original status levels, they have to aspire after different levels of education or occupation. Students of higher social background aspire after higher educational attainment because if they do not reach these higher educational levels, they risk status decline; if students from lower class attain the same educational level, they socially move upward.³⁶

As to the process through which the unequal distribution of *social resources* causes social class differentials in educational choices, Erikson and Jonsson (1996) argue again that more educated parents possess more and better understand relevant information on the educational system and can help their children take the "right choice". In addition, this knowledge is further spread among children's friends and hence parents' educational resources "are diffused within the social circles the children belong to" (Erikson and Jonsson 1996: 30). Moreover, social resources may influence the perception of the benefits. Students may want to attend the same track as their friends and may adopt the same higher aspirations as they have. Third, regarding especially the choice of elite schools, families reinforce each other's consideration of benefits such as prestigious occupations that can be acquired through attending a specific school or track. They conclude that social resources – like educational and cultural resources – supposedly vary little among countries and therefore cannot be valued as an explanatory factor for international inequality differences. Consequently, they look for explanations on the institutional level of educational systems.³⁷

Institutional factors

Erikson and Jonsson (1996: 33-43) identify five institutional factors that should be considered when (cross-country differences in) transition rates from one educational level to the next are investigated. First, the length of different educational courses is important. When various educational tracks a student can choose have the same lengths, the choice of the

³⁶ As will appear in the following section on the theoretical model by Breen and Goldthorpe (1997; Goldthorpe 1996b), this mechanism of social class differences in aspirations corresponds to the well-known "relative-risk-aversion"-hypothesis. This assumption – roughly formulated – postulates that *all* students and parents want to maintain their family's social status and as higher educational tracks lead to occupations of higher status, students from higher classes have to complete higher educational tracks than students from lower classes.

³⁷ Additionally, Erikson and Jonsson (1996) propose that work-related class differences and contextual effects play a role in the generation of social class effects on educational choices. Due to weak empirical evidence, however, they reject the assumption that parent's working conditions influence children's educational and occupational aspirations in such ways that the children wish to attain certain educational or occupational *levels*. They rather admit that parent's working conditions influence the children's wish to do a certain *type* of school, study or job. With regard to the contextual effects, they suggest that the social context in school and neighborhoods influences students' probabilities of attending certain tracks, but that social class effects and contextual effects interact in ways that off-set each other.

student will hardly be affected by the costs of schooling since the costs will not differ between the tracks. Second, reforms that aimed at “removing barriers (or increasing opportunities)” have to be considered. For instance, Sweden owes its reduction of educational inequality to the comprehensive school reform in the 1950s that postponed the first crucial educational decision point.³⁸ Another removing of barriers is the “elimination of dead ends” (Erikson and Jonsson 1996: 36): Inequality can be reduced if students have the chance to correct previous decisions by changing tracks at later times, for instance. The third factor is the “size of the educational system”. Addressing this factor means questioning whether a specific country has undergone an educational expansion and, consequently, an increase of the relative number of students in higher education has occurred.³⁹

In view of the research topic of this thesis, the fourth factor is especially interesting: the principles on which the transition from one level of the educational system to another is based. More specifically, one has to consider whether the choice of subsequent educational pathway corresponds to a *meritocratic* selection (e.g. through standardized tests) or a subjective choice (e.g. when parents have the freedom of choice). They emphasize the special case of England where inequality of educational opportunity is relatively low although income inequality is relatively high, job security is not the best and selection of students into different educational tracks happens at early age. Despite these circumstances predict a relatively high impact of social class on educational attainment, social class differentials in transition rates are low because, as claimed by Erikson and Jonsson (1996), these are based on shown performance of the student rather than on their parents’ wishes. Further, they argue, if fifty percent of the association between social class and educational attainment are due to choice, replacing choice by actual performance can have a considerable reducing effect on that association. However, they see some possible risks coming with meritocratic decisions, too. Even when

³⁸ According to Erikson and Jonsson (1996), the time point of tracking considerably affects social class differences in educational choices through three mechanisms: First, since it may be relatively difficult to assess a child’s chances of success (*P*) when the child is young, higher class parents will be more optimistic in estimating these chances because they think that they are more confident that they will be able to help their child or because they simply believe that high educated parents have bright children. Second, in line with the argument on class differences in aspirations, since the risk of social demotion is greater the earlier a student drops out of school, parents from higher social classes will place even more value on their child’s attending a higher track (or not leaving school). Third, the time point of tracking may influence family’s decision-making through the cost-parameter: on early decisions regarding tracks that imply long and, thus, costly educational careers, social class has a stronger effect (than on later decisions where the various educational courses appear shorter).

³⁹ They suggest that educational expansion can be successful if it is caused through postponing the first important point of (self-) selection, lowering requirements of access (e.g. required scores on standardized tests, *numerus clausus*), study grants for students of low economic background were introduced or expanded, and fourth, when expansion leads to a ceiling effect in the sense that almost hundred per cent of students from the higher classes are attending a higher school track and, hence, when student from lower classes follow, social inequality in the attendance of that higher track will be reduced.

the transition is based on performance, *not* continuing school remains a free choice. Hence, if the costs of further education appear high to a family, they can still deliberately let their child drop out through failure in the tests. Therefore, meritocratic selection should happen at early transitions where school continuation seems not as costly. This feature of educational systems – the processes of selection at crucial transition points – is the core of the research questions of this dissertation. However, while Erikson and Jonsson concentrate on the differentiation between selection based on a family's choice and on actual performance, I investigate the consequences of a third way of selection, namely selection based on teacher (and headmaster) choice.

Finally, as a fifth institutional factor that has to be considered when analyzing social inequality in educational transitions, Erikson and Jonsson (1996: 42-43) propose “elite institutions and private schools”. Elite schools may drive social class differentials in educational choices because they are associated with high costs and benefits and possibly with higher chances of success because of low teacher-student-ratios. Additionally, direct costs may be reduced through student grants but still the “life-style” in the social circles may be costly. In sum, high rates of elite and private schools may discourage children from lower classes.

In respect to the research question of this dissertation, Erikson and Jonsson's model qualifies for a basic theory on families' decision-making and provides an idea that has the same “cultural theory”-roots as the suggestion by Lareau and Weininger (2003): They argue that cross-country differences in social inequality in education could partly be explained through differences in the complexity of educational systems because more complex systems require *knowledge of the educational system*. Since parents from higher social classes are more likely to have such knowledge, they know for instance which school tracks have “dead ends”. Even though this thesis is not concerned with explaining cross-country differences, this argument hints at a mechanism that might contribute to social class effects on families' school track requests within the institutionalized dialogue: for instance, if families from higher social classes are more likely than families from lower classes to know that they have the right to reject the staff meeting's proposition and if families who know their right to reject are more likely to choose the general track even though the child has relatively poor marks, social classes effects on families' requests are reinforced through social class differences in families' knowledge of the educational system. However, as the French government incites headmasters and teachers to inform families about the full details of the dialogue, it seems quite improbable that families do not know their rejection right. Still, the French educational

system is complex enough to assume that particularly informal knowledge of the educational system – e.g. which schools have a “favorable” social composition – is important (Duru-Bellat 1996; Karsten, Visscher and De Jong 2001).

Moreover, they draw attention to some *general* institutional aspects that may also affect social inequality in secondary education in France (as compared to other countries). Even though these arguments do not directly refer to the research question of this thesis, they should be mentioned: On the one hand, the prevalence of private schools possibly increases social class effects on the transition from lower to upper secondary education because higher-class families enroll their children in private schools to improve their performance and therefore increase their chances to get access to the general upper secondary track (e.g. Caille 2004). On the other hand, reforms that have removed “dead ends” and strongly increased the rates of students in higher education supposedly have reduced social inequality in educational transitions (see Chapter 2, e.g. Brauns 1998; Ichou and Vallet 2011).

Finally, reforms have modified the transition regulations and implemented the *dialogue between family and school* in order to reduce social inequality in the transition to upper secondary school. This institutional specificity of the French educational system completes Erikson and Jonsson’s list of selection regulations (i.e. “meritocratic” selection and “freedom of choice”) and provides the opportunity to gain new insights in institutional differences that may contribute to cross-country differences or trends in social class effects on educational attainment.

3.2.3 THE BREEN AND GOLDTHORPE-MODEL

Almost at the same time when Erikson and Jonsson developed their theory to explain the “Swedish exceptionalism”, John Goldthorpe advanced a resembling rational action theory to explain trends in educational inequality. He adopts a notion of rationality that is weak: actors have goals and “tend in some degree to assess the probable costs and benefits rather than, say, unthinkingly following social norms or giving unreflecting expression to cultural values” (Goldthorpe 1996b: 485). Besides, actors know – to some extent – about their situation and about their opportunities and constraints. *All* individuals have this knowledge and are perfectly aware of what they want and what they can, but they act rationally by tendency and especially given high numbers of individuals. They opt for specific courses of action depending on the *resources* that they hold and they adapt to the constraints and possibilities that provides their actual situation. Social class position is defined by employment status and the regulation of employment, which means the distinction between

employees that work under a “labor contract” and in a “service relationship” (Goldthorpe 1996b: 487). Importantly, classes are *not* characterized by class cultures, values, norms or “forms of consciousness”.⁴⁰

Like the Erikson and Jonsson-model, the model by Goldthorpe (1996b) and Breen and Goldthorpe (1997) is based on Boudon’s distinction of primary and secondary effects (1974) and Keller and Zavalloni’s theory of aspirations (1964) or “positional theory”. It focuses on the secondary effects in order to explain why families actually do not exploit the opportunities that have become more equal thanks to increased rates of educational participation and reforms. His initially formulated explanation for this phenomenon is

“Class differentials in educational attainment have persisted because, even though with educational expansion and reform, the general balance of costs and benefits associated with more ambitious options has steadily changed so as to encourage their take-up, little concurrent change has occurred in the relativities between class-specific balances: that is, between such cost-benefit balances as they are on average assessed from the standpoints represented by different classes of origin. What needs then further to be shown – or at all events hypothesized – is why, in this latter respect, such stability should have prevailed” (Goldthorpe 1996b: 492).

Together with Breen, Goldthorpe refined this theory and expressed it in a formal model (Breen and Goldthorpe 1997). This model aims, again, at explaining the rise in educational participation, the relatively low change of social class differentials in educational attainment despite the expansion and the quick and sharp decrease of gender differences in educational attainment. The recent finding that actually social inequality in education has not persisted does in no means devalue the theory. It still is “ultimately” a model of educational choice, although it has been developed to explain trends in social inequality in education (see e.g. Gabay-Egozi, Shavit and Yaish 2010)

The model starts from the assumption that a student can choose between *leaving* or *staying* in education. If the student stays, he has to take an examination at the end of the educational track he is attending and he can *pass* or *fail* this examination. The student and his family base their decision to stay or to leave on the evaluation of three factors: The likelihood of succeeding in education, i.e. passing the examination, direct and indirect costs of staying in school (e.g. tuition fees, forgone earnings) and the value of utility that the student and her parents associated with the three possible outcomes “leave”, “pass” and “fail” (Breen and

⁴⁰ The definition of social class according to Erikson and Goldthorpe (1992) will be outlined in subchapter 7.3 along with the presentation of the variables used in this dissertation’s empirical analysis.

Goldthorpe 1997: 279, 281). Regarding the costs, these are greater than zero if the student stays in education and equal zero if she leaves. The utility of the three outcomes depends on their probabilities to lead to one of three social classes, which can be arranged in a hierarchical order: (i) the *service class* being the highest class, (ii) the *working class* as intermediate class and (iii) the *underclass* representing the lowest class. The likelihood of entering the service class is higher if the student stays in education and successfully passes the examination than if he fails or leaves school (Breen and Goldthorpe 1997: 282). Continuing education but failing at the exam increases the probability of ending up in the underclass; hence, staying in school is risky. Those who leave education are more likely to enter the working class than to enter the service class and the same is for students who have stayed in school but failed. Still, for those who remained in school but failed the odds of entering the working class instead of the service class may be smaller. Finally, staying in education and succeeding with the exam increases the chance of entering the service class instead of the working class.

Further, the three classes differ with regard to their average ability and the resources which they hold and which they can make use of the account for the costs of education (Breen and Goldthorpe 1997: 283-287).⁴¹ Three mechanisms generate social class differentials in families' decision to remain in school instead of leaving it: The first mechanism is the well-known assumption termed "relative risk aversion": Families from the service class and families from the working class, to the same degree, aspire to maintain the social status of the family. That is to say, *all* families want the child to attain at least the same social class position as the family has (through parents' occupation) because they seek to avoid downward social mobility. For families from the underclass the relative risk aversion is zero since it is the lowest class and they cannot move downward any further. It is important to stress that every class has the same level of this aspiration or, in other words, that all families put the same value on maintaining their social status. Breen and Goldthorpe give a lot of weight to this mechanism of relative risk aversion and assume that the other two mechanisms – social class differences in average ability and level of resources to account for the costs of education – reinforce its impact. The relative risk aversion mechanism is in direct line with the "positional theory" of Keller and Zavalloni (1964). As indicated before, the second mechanism operates through social class differences in academic abilities. It corresponds to

⁴¹ They further assume a normal distribution of the ability in every class and that the average ability is higher in the service class than in the working class. Moreover, they suggest that the resources have a logistic distribution and that the mean level of resources is higher in the service class than in the working class.

the primary effects of social stratification (Boudon 1974) and influences families' decision-making through the "likelihood of success"-parameter. The better the academic performance of a student the more probable it seems that the student will pass the examination. Since academic performance varies by social class, social classes differ regarding their average evaluation of their children's likelihood of success. The likelihood of success is higher on average in the service class than in the working class. The third mechanism operates through the association between social class and level of resources to account for the costs of education. Since families from the service class are better equipped than families from the middle class, they are more likely to decide to let their child stay in education instead of leave school.

After the presentation of their basic decision-making model, Breen and Goldthorpe (1997) address the fact that, in reality, more than one crucial decision has to be made along an educational career until the diploma is attained that provides access to a specific social class. Therefore, actual choices may be made in the light of subsequent choices. For instance, given entering university is only allowed to students who successfully completed secondary education, a student may decide to stay in secondary education because he wants to gain access to university. Assuming such sequence of decisions, the theoretical model to explain the first choice must be based on "backward induction", i.e. starting with the explanation of the final decision in order to explain the previous decision. Applying this strategy to the before mentioned example, one would start with the analysis of social class effects on families' decision to send their child to university (instead of *not* sending the child there) and would, subsequently, analyze families' decision to let their child continue secondary education (instead of quitting it). A family's subjective assessment of the child's chances of successfully completing university influences their decision on whether to let the child carry on with secondary school. This implies that, holding constant academic ability and resources to account for the costs of education, actual choices will be influenced by expectations about choices at higher levels of the educational career. Moreover, social class differences will be lower in choices at higher levels than at lower levels because the difference in abilities will have been reduced and because the risk of downward social mobility will be lower or even zero. I suggest that the same could be assumed for a sequence of subsequent decisions at one transition such as families' and teachers' choices within the dialogue at the transition to upper secondary education in France.

Even though this dissertation is not concerned with the explanation of more than one transition along students' educational careers, it analyses subsequent choices that may affect

each other. Breen and Goldthorpe's (1997) assumption that actors take into account future choices could be applied to families' decision-making within the dialogue. Families make school track requests prior to staff meetings' school track propositions and prior to their decision to reject these propositions. Following the "backward induction"-argument, families' future decision to reject and attend the talk with the headmasters may influence their actual school track request. More specifically, families may take more "risky" school track requests (i.e. general track requests even though the student has poor marks and the likelihood is high that the staff meeting does not accept this request) if they think that they have good chances to persuade the headmaster in the talk. Hence, their evaluation of their decision to reject might influence their request.

3.2.4 VARIATIONS OF RATIONAL ACTION APPROACHES TO EDUCATIONAL DECISION-MAKING

This subchapter summarizes differences between Boudon's theory, the Erikson and Jonsson-model (E&J-model) and the Breen and Goldthorpe-model (B&G-model). Moreover, it presents core arguments of other RAT-approaches to educational decision-making in order to evaluate whether and how important former RAT-applications and more recent ones address the impact of the institutional context on families' decision-making.

Differences

The core similarities between the presented theories of Boudon (1974), Erikson and Jonsson (1996) and Breen and Goldthorpe (1997) are: the aim to explain (trends in) social inequality in education, the RAT-foundation, the conceptualization of primary and secondary effects, the adaption of Keller and Zavalloni's (1964) "social position"-argument and the definition of the three mechanisms social class differences in performance, social class differences in economic resources and social class differences in the "need" to attain a certain educational level to maintain the family's social status. Although the theories are very similar, they differ in some respects. Notably, they vary with regard to the emphasis they put on the different parameters (e.g. Kristen 1999: 36). The E&J-model does not emphasize risk aversion (Erikson and Jonsson 1996: 15), while in the B&G-model relative risk aversion is the core mechanism driving the reproduction of educational inequality and causing its persistence over time (Holm and Jaeger 2008; Van de Werfhorst and Hofstede 2007). As Gabay-Egozi, Shavit and Yaish (2010) put it, the relative risk aversion mechanism is the "centerpiece" of the B&G-model. Another difference between the E&J-model and the B&G-model is that the former more emphasizes the primary effects and outlines mechanisms

behind them. Moreover, Erikson and Jonsson advance the role of the institutional context and do not expect that any component of the decision-making model is most relevant. They rather leave open to further research to find out which of the determinants is most relevant (Becker 2000; Kristen 1999).

Moreover, Boudon assumes that the secondary and not the primary effects become increasingly important at higher stages of educational careers. However, this assumption could not be supported by empirical evidence (e.g. Halsey, Heath and Ridge 1980: 128-133) and Breen and Goldthorpe propose the opposite. They assume that social class differences are generally lower in later educational transitions and the secondary effects are smaller because families can loose less because they have already attained a certain educational level. However, with regard to the trends in secondary effects *over time*, Goldthorpe (1996b) argues that the secondary effects become increasingly important as educational expansion develops. This is where he sees the advantage of Boudon's differentiation between primary and secondary effects.

The three theories clearly vary with regard to their use of "cultural arguments", i.e. arguments that are more or less directly related to the theories by Bourdieu and other proponents of the idea that classes differ with regard to their norms, values and life-styles. Generally, Boudon, Erikson and Jonsson apply such arguments while Breen and Goldthorpe strictly refrain from it. For instance, Boudon (1974: 30) argues that higher education has become a *social norm* that students feel they should follow because their families and peers did so and put pressure on them. However, Goldthorpe rejects this argument as it concerns only little groups and milieus and hence has not the power to explain "regularities as extensive, temporally and spatially, as those here in question" (Goldthorpe 1996b: 494). Breen and Goldthorpe (1997: 283) do not assume any "class-specific cultural values or social norms nor any class differences" in the subjective evaluation of the probabilities of entering a specific social class with specific educational degrees. Erikson and Jonsson emphasize the difference between "academic ability" and "school performance" and advance arguments that could have been derived from Bourdieu's conflict-theoretical ideas. They argue that teacher evaluations of students may be affected by *middle-class biases* and, even though the teachers do not consciously discriminate against children with lower class origin, teachers may reward students' abilities and behaviors that meet schools' "cultural values" (Erikson and Jonsson 1996: 11-12).

Another difference refers to the role that *social costs* play in student's decision-making. While Boudon, Erikson and Jonsson assume that students' educational choices may be influenced by the decisions of their peers, Breen and Goldthorpe explicitly reject this assumption. Again, they do so since they do not believe that this minor "cost-parameter" could explain the "major" persistence of the association between social class and education although educational expansion has happened (Goldthorpe 1996b: 495).

At least the difference regarding cultural arguments and social costs seem of minor relevance in view of this dissertation's research question as they concentrate on *trends* in social class differences in educational attainment while this dissertation investigates the generation of social class differences in educational choices *at one time point*.

Human capital theory

All three models do not only focus on monetary costs and returns but integrate "sociological" components such as the status-maintenance aspiration. By contrast, *human capital theory*, which represents a classical economic approach to educational decision-making, focuses on monetary components. Human capital theory is highly relevant advancements of neoclassical labor economics and was mainly introduced by Gary Becker's (1993 [1964]) work.

According to neoclassical economists, the wage an employee receives for her work is determined by labor supply and demand (Sesselmeier and Blauermel 1997). To achieve the state of equilibrium between labor and supply, several preconditions such as perfect competition on the labor market, perfectly mobile workers, and perfect and symmetric information about wage offers and wage demands must be fulfilled.⁴² Another premise is that employees are perfectly homogeneous meaning that all workers are equally productive and hence they are replaceable. Since the marginal productivity determines wages, all employees are paid the same wages and hence a persons' educational attainment does not affect her returns on the labor market.

Human capital theory gives up the strict premise of perfectly homogeneous workers (Becker 1964). Instead, it adopts the assumption that the productivity of workers depends on their *human capital* endowment. In order to increase their productivity and, as a consequence, to achieve higher wages, individuals invest in *human capital* (i.e. knowledge and skills). Individuals invest in education and training whereby they take into account "investment

⁴² For an outline of all preconditions and the theory in general see Sesselmeier and Blauermel 1997 or Hinz and Abraham 2005.

costs” such as direct training costs (e.g. tuition fees, time, intellectual efforts) and opportunity costs that emerge because of foregone earnings and leisure time, for instance (Sesselmeier and Blauermel 1997: 66). Individuals’ decisions on how long to stay in education are based on a comparison of discounted expected returns and opportunity costs of different educational choices (Davies, Heinesen and Holm 2002). Returns mainly include expected lifetime earnings. Opportunity costs consist of foregone earnings and possible direct costs are, e.g., tuition fees. In economic terms, individuals do not cease investing until the marginal costs of the investment exceed the benefit of the marginal returns to the *human capital*. In analogy to monetary capital, *human capital* can amortize since knowledge can become obsolete (Hinz and Abraham 2005: 33).

Individuals may also consider social status and occupational prestige as returns to investment in education (Maaz et al. 2006). Moreover, human capital theory yields assumptions on the impact of social origin. Simply, due to the costs of investment, individuals with more economic resources, i.e. students with a higher social background, are more able to account for the cost of investment. Davies, Heinsen and Holm (2002) confront a hypothesis derived from the model by Breen and Goldthorpe with one derived from human capital theory: While the sociological model suggests that the function of the benefits of education and parents’ education has a “kink” or discontinuity at the point where the child reaches the educational level of the parents (prior to the point, the slope sharply increases; beyond, it remains constant), human capital theory yields that there should be no kink and that the effect of parent’s education should vanish when income (and ability) are controlled.

Preferences

Like human capital theory, the seminal approach by Gambetta (1987) is based on rational action theory. Moreover, the core of Gambetta’s model takes an economic perspective as it assumes that students evaluate their ability and possible labor market returns in order to assess which available choice will maximize their labor market or, simply, material benefits. Individuals evaluate the three elements rationally, but on the basis of personal *preferences*. Hence, Gambetta’s theory contains – other than human capital theory – assumptions dealing with unconscious and intentional mechanisms.

He assumes that aside from economic constraints, institutional and cultural constraints have an impact on educational choices. Institutional constraints are, for instance, the number and length of alternative educational tracks, selection procedures and public programs to support students of disadvantaged backgrounds. Gambetta (1987: 169) posits that

“educational institutions shape the set of feasible options for everyone, irrespective of their social background” and they therefore do not generate social class differences in educational behavior. However, he maintains, institutions indirectly contribute to the generation of social class differences when they do not provide economic support for disadvantage students. Therefore, Gambetta argues that an institutional context that is formally accessible for students from all social classes but that requires unequally distributed resources such as economic capital promotes the generation of social inequality. When addressing cultural constraints, Gambetta makes use of the term “cultural capital” but without referring to Bourdieu. He argues that this type of constraint has considerably less impact on educational choices than economic constraints.

As compared to Boudon’s theory, he emphasize that his model integrates the effects of cultural resources. Boudon would explain a *net* effect of social class on educational choice (i.e. a social class effect that remains when economic and cultural constraints as well as ability and expected labor market returns are taken into account) by means of the “social position”-argument by Keller and Zavalloni (1964). However, Gambetta assumes that class differences in individuals’ preferences cause this remaining social class effect: For instance, students with parents who are very highly or very poorly educated take less into account labor market returns and among working-class students those with higher educated parents are more likely to go to university as compared to those with lower educated parents. From these findings Gambetta concludes that cultural resources rather influence the formation of preferences than that of learning ability.

More recent approaches

In a relatively recent study, Becker (2000) extends the rational action approach by Esser (1999b).⁴³ Esser’s approach is a variation of the RAT-models of Breen and Goldthorpe and Erikson and Jonsson that puts considerable emphasis on families’ evaluation of costs and expectations regarding status decline. Becker argues that Esser’s model ignores the micro-macro-link, i.e. the association between educational decisions of individual families and transition rates of students. He claims that the aggregation of many individual decisions does not fully account for the transition rates in the German educational system because teacher recommendations influence these transitions. Therefore, the models cannot claim to fully explain the macro-patterns in transition rates. Becker suggests splitting families’ decision-

⁴³ Esser’s approach will be presented in detail in Chapter 5 as it is the basis of the model I develop to explain families’ decision-making within the dialogue.

making process into two “sub-processes”: the first process consists of families’ making of their educational intentions and the second process includes the selection through the school system, negotiations of parents with the schools and institutional regulations. As a consequence, he maintains, parents’ educational intentions do not correspond to their actual decisions anymore. This is because parents may take teacher recommendations into account and differ in terms of their belief that they have power over the final transition decision. Moreover, they may differ in their abilities to carry through their will against the educational institution. He concludes that only when parents’ will is not “restricted” by institutional regulations, educational intentions will correspond to the actual decisions.

Becker’s approach is an important attempt to integrate an institutional component into a theory on families’ decision-making. Similarly, I will differentiate families’ decision-making into two stages: first, a family’s *independent* decision, i.e. how a family would decide if there was no dialogue and in particular if there was no subsequent school track proposition by the staff meeting; second, a family’s actual school track request. The actual school track request is affected by the institutional setting. The drawback of Becker’s extension is that it does not elaborate the micro-mechanisms that cause the differences between families’ educational intentions and their actual decisions. That is to say, he does not explain how families’ actual decisions are affected by the teacher recommendations, by parents’ attempts to influence teachers and by their belief in their power to influence the actual transitions of their children. Moreover, he does not outline how social class differentials operate through these mechanisms. By contrast, my refinement of Esser’s model formulates such mechanisms and explicates how social class differences emerge through specific institutional aspects of the French institutionalized dialogue.

Other RAT-approaches draw attention to the impact of institutional circumstances on families’ educational decisions, too, but they focus on other aspects. For instance, Hillmert and Jacob (2003) advance a model that addresses social class differentials in access to higher education and the impact of the set of available tracks. The model integrates a human-capital approach: it assumes that the benefits students assign to different educational pathways are determined by the *labor market income* they will earn after completion of the pathway. As they consider a decision that is made at a transition close to labor market entry, they argue, it makes sense to emphasize the impact of labor market returns. Their decision-making model includes two “individual parameters”: the subjective expectation of success and the “time horizon” which represents the time point up to when the expected income will be cumulated. Three “system parameters” include expected level of income, depending on the attained

qualification, the average duration of university studies and vocational training, and a general rate of discount to calculate the actual value of future income. According to the model, a student opts for one of the alternatives if the expected income, depending on individual likelihood of success and *time horizon*, is the highest of all alternatives. Social classes differentials arise because of two mechanisms: First, because classes differ with regard to their equipment with social and cultural resources and therefore differ in their evaluation of expectations of success; second, class-specific distribution of economic resources causes differing calculations of the time horizon.

To assess the effect of varying sets of alternative educational tracks, Hillmert and Jacob apply their decision-making model to student's choice within three different educational systems: First, a system providing the alternatives (i) university studies and (ii) entering the labor market; second, a system additionally proposing the alternative vocational training; third, a system giving also the possibility to combine university studies and vocational training by entering university after having completed vocational training. In a system with vocational training (as compared to a system without this alternative), students of lower social origin would rather enter vocational training than university because of their "shorter time horizon". By contrast, in a system that additionally provides the opportunity to attend university after having completed vocational training, students whose expectations of success have increased through educational training will finally decide to attend university. However, students with relatively high chances of success but a low time horizon will decide against the combined pathway. In such an institutional context, students of lower social origin who *could* succeed in university will not attend it because their families have not enough economic resources.

Pfeffer (2008) suggests a mechanism that explains why differences in the stratification of educational systems can explain cross-country differences in social inequality in educational attainment. He argues that highly stratified systems require families to have more knowledge of the educational system than systems with few educational tracks. As highly stratified systems are complex because there are many tracks with "dead-ends" students and parents must be well informed about which educational choices cannot be corrected later on. Since parents with higher educational attainments spent more time in the educational system, they are better equipped with such relevant knowledge and hence they can better help their children to take the "right decisions". Even though Pfeffer (2008) does not provide a direct empirical test of this mechanism, he generally finds that social class differences on educational attainment are stronger in countries with highly stratified educational systems.

Pfeffer's (2008) suggestion that social class differences in the knowledge on the educational system contribute to the generation of social class differences in school success is not new (see e.g. Erikson and Jonsson 1996). However, as opposed to other contributions he puts it forward as a central mechanism for the explanation of the impact of a specific institutional aspect (i.e. stratification of the school system). Knowledge of the educational system plays an important role in the explanation of social class differences in families' capacities to meet schools' standards (e.g. parental involvement), too. More specifically, knowledge of the educational system is a facet of "school relevant" cultural capital (Lamont and Lareau 1988; Lareau and Weininger 2003). Since I suggest that the institutionalized dialogue between family and school requires parents to be involved and to know how the dialogue functions, I will integrate a similar mechanism in the model on families' decision-making within the dialogue.

The approaches by Becker (2000), Hillmert and Jacob (2003) and Pfeffer (2008) provide theoretical suggestions for the effect of specific institutional circumstances on families' decisions. A theory by Morgan (2002) does not consider the institutional context but provides an argument that can contribute to understanding families' educational behavior and generation of social class differences in their educational choices within the French institutionalized dialogue. Morgan (2002) follows RAT and argues that individuals act in their best interest, i.e. they try to "maximize their utility". Relying on theories from social psychology, Morgan further proposes that students select a *prefigurative commitment* to a future action such as "enrolling in college after high school" and internalize this commitment until it becomes almost unconscious. The prefigurative commitment defines an individual's *preparatory commitment*, i.e. everyday behavior that an individual undertakes to prepare for the prefigurative commitment. With regard to student's educational decision-making, it is the student's (and parents') preparation for the enrollment in college and its successful completion.

Morgan's (2002) model yields the assumption that the better individuals are equipped with information that forms their beliefs on the probabilities of success and on attaining "payoffs" (which are not defined in more detail), the clearer is the selection of a prefigurative commitment, the more this is internalized and the more it affects an individual's everyday behavior. One interesting potential Morgan sees in his model is that it allows the formalization and empirical evaluation of vague concepts such as those of Bourdieu. He argues that the model enables addressing Bourdieu's claim that social class should be treated

at the aggregate level and that educational attainment is a function of an unconscious estimation of success chances (see also Subchapter 3.1.1).

In view of the research topic of this thesis, Morgan's (2002) approach is interesting because it draws attention to families' *preparatory* behavior. Given an institutional setting such as the French dialogue between family and school, preparatory behavior can be supposed to play an important role: Since the staff meeting makes a school track proposition that is virtually binding, families have to find ways to influence that decision. Possibly, families will try to influence this decision by meeting the standards of the school. Again, as I will explicate in Chapter 5, I suggest that families believe that if they meet schools' standards (e.g. by being involved), they get preferable treatment. According to Morgan's theory, French parents whose *prefigurative commitment* is "my child will attend the upper secondary school general track" will early become involved (e.g. through PA-membership or as parent representative). This involvement is part of their preparatory commitment.

3.3 Confrontation of the two approaches

3.3.1 CRITICISM

This chapter has presented the "cultural approach" to social class differences in educational attainment as mainly consisting of the theory of "social reproduction via cultural reproduction" by Bourdieu and Passeron and cultural capital literature that arose from it. To lead to the arguments on cultural capital in family-school interactions (Subchapter 3.1.3), I have presented criticism of cultural capital literature further above (Subchapter 3.1.2). By contrast, I outline the criticism of Bourdieu's original theory (and of similar arguments referring to class-specific norms and values) at this point since these final sections have the goal to evaluate the "cultural approach" and the "RAT-approach".

It is argued that "cultural theories" – i.e. theories that, according to Goldthorpe, are based on the assumption that class is strongly associated with culture and that the culture of some classes positively influences school success – cannot provide a solid explanation for the *temporal persistence* of social class differentials in education (Goldthorpe 1996b; 2007a). This is because actual developments such as the educational expansion and "equalizing" reforms of the educational system give reason to expect that social class differentials in cultural resources were considerably reduced. The theory of Bourdieu and Passeron – which is called by Goldthorpe a "stronger" form of cultural theory – and "weaker" forms of it fail

because of educational expansion.⁴⁴ The fact that children from *all* social classes became more likely to achieve higher educational attainments discounts the main assumption of “cultural reproduction theory” that the school system deliberately excludes children from lower class (or makes them exclude themselves). Goldthorpe presents extensive results to show that Bourdieu’s arguments could not be supported empirically and even point in the opposite direction of what his theory would imply (2007a: 90-93, 99). For instance, Bourdieu argues that the school simply *reproduces* cultural capital meaning that children of favorable social classes “receive” cultural capital from their parents, cultivate it and are rewarded for it in school. But actually, empirical findings show that in school cultural resources are *created*, even for students of less favorable background (Goldthorpe 2007a refers to Halsey, Heath and Ridge 1980). Moreover, cultural theory yields the hypothesis that social class differentials in education have widened and this assumption neither was supported empirically (Goldthorpe 1996b: 490; 2007a: 91).

Erikson and Jonsson (1996: 31) more generally criticize normative explanations for social class differentials in educational choices. They argue:

“[...] if educational choices were governed by (class-specific) norms, the dramatic expansion of higher education would not have occurred. Similarly, as mentioned above, if it were a norm for working-class children not to attain higher education, it is difficult to understand why they do in fact largely go on to higher educational if they perform well in school.”⁴⁵

Nash (2003) emphasizes that socialization processes have to be an important part of a comprehensive theory on social class differentials in educational attainment, but he rejects Bourdieu’s argument that all social class differences in “ability” are produced by the *habitus* (i.e. here, class specific interactions within the family) and are fixed before the child enters school. Empirical evidence suggests that other family resources than cultural capital and the school context play an important role in the generation of primary effects. In line with this point of criticism, Goldthorpe (2007a: 89) maintains that the concept of *habitus* implies an exaggerated perception of the importance of socialization within the family.

Passionate opponents of Bourdieu as well as researchers who see potential in his work and adopt some of his ideas criticize that his theory lacks clarity and, partly as a consequence

⁴⁴ The “stronger” version of the cultural approach is also represented by the work of Willis (1977) and Bowles and Gintis (1976).

⁴⁵ However, they object that social norms can have a strong impact in communities or circles of high social closure in which succeeding in school is of very high relevance (Boudon 1974; Coleman 1988). This could be, for instance, a group of parents who are friends and who are all involved in their children’s schooling (e.g. through organizing school events, being parent representatives).

of this, is difficult to apply. Bourdieu is accused to be not clear on the role of the state in social and cultural reproduction (Goldthorpe 2007a). Furthermore, it is argued that his class analysis is not systematic, not enough exact and, hence, slippery (Nash 2003; Savage, Warde and Devine 2005). With regard to the “micro-mechanisms”, which are particularly important in view of the research topic of this dissertation, the original theory is continuously criticized for being too vague about the concept of cultural capital, its transmission from parents to children and its translation into educational success (e.g. Becker 2010; Dumais 2002; Jaeger 2009b; Lamont and Lareau 1988; Lareau and Weininger 2003; Sullivan 2001). As a consequence, cultural capital literature varies with regard to the operationalization of cultural capital and provides ambiguous results (see Subchapter 3.1.2 and, e.g., Dumais 2002; Sullivan 2001). At the same time, the proponents of the concept and of the theory make use of the ambiguity of the arguments to confront critics with the accusation of misunderstandings and misrepresentations (Goldthorpe 2007a: 83). Indeed, for example, Nash (2003: 235) states that Goldthorpe’s critique of the socialization theory is “both redundant and misguided”. Finally, it is interesting to note that Bourdieu himself did not provide a convincing empirical test of his theory (Sullivan 2001).

In respect to the rational action approach a lot of criticism refers to RAT in general. It is argued that RAT cannot be tested empirically and does not yield assumptions that concern “substantive fields of application” (Kroneberg and Kalter 2012). Moreover, RAT is criticized for not being *comprehensive*, i.e. being capable of fully explaining *all* social phenomena (e.g. Boudon 2003). This critique calls into question the core assumptions of RAT (e.g. the postulate termed “egoism” which assumes that the actor is mainly taking into account consequences that concern only her-self). One reason for this critique is that these assumptions could not be supported by empirical evidence (Kroneberg and Kalter 2012).⁴⁶

Critics of the RAT-approach to educational stratification do not acknowledge that it is capable of explaining trends of social class differences in education and that it yields hypotheses that are open to test (e.g. Nash 2003; Savage, Warde and Devine 2005; Scott 1996). They generally call into question RAT as a foundation of an explanation of the secondary effects. They say it is not solid and, more specifically, they criticize the application of *methodological individualism*. Goldthorpe (1996b) proposes that one does not have to assume that *all* individuals act rationally and that it is sufficient to assume that rational action is a “common factor” influencing individuals’ behavior. Therefore, he maintains, when

⁴⁶ This is the reason why “softer” RAT-versions were developed.

analyzing large groups of individuals, macro-sociological phenomena can be explained with RAT. The critics object that there is no empirical method that can identify this “common factor” and measure its influence on the generation of the macro-sociological phenomena in question (Nash 2003). The theory’s considerable limitations, it is argued, are due to its foundation on economic reductionism and methodological individualism (Savage, Warde and Devine 2005). Moreover, Goldthorpe’s approach to social class is rated as unprogressive for its “rather conventional emphasis on the division of labor [...] without any real theoretical foundations for explaining how the division of labor comes to be the way it is” (Savage, Warde and Devine 2005: 39).

Another point of criticism is Goldthorpe’s argument that social classes differ with regard to their values, norms and “forms of consciousness” and that, therefore, such social class differentials need not be integrated in the theoretical model (Nash 2003; Savage, Warde and Devine 2005). On Goldthorpe’s explanation that such discrepancies between classes might be difficult to validate empirically Nash replies that even if a theory that attempts to be realistic will be hard to test empirically, this is no reason for not developing it. Interpreting Goldthorpe’s argument alternatively, namely that there is no empirical evidence for normative class differentials, Nash objects that there is plenty of evidence showing such differences.

Ditton and Krüsken (2009: 75-76) mention that it is questionable whether educational decisions are *rational* choices, i.e. whether they are “real calculations” or rather based on heuristics. Similarly, Nash (2003) argues that theories such as that of Boudon, meaning RAT in general, are not realistic and can be rejected since they assume that people can make cost-benefit calculations when they actually are not able to (e.g. because of missing information). His core critique is that the RAT-approach lacks realism. As shown by empirical evidence, he claims, individuals sometimes act rationally, sometimes follow seemingly thoughtless the actions of their community and most often act in ways with reasons that are not identifiable (Nash 2003: 449).⁴⁷ Maaz et al. (2006) see as a disadvantage of RAT-approaches to educational decisions that they do not factor in personality traits of the decision-makers such

⁴⁷ By contrast, Nash’s (2003) explanation for the secondary effects is based on class-specific norms and values: He claims that, given the same school performance level, students from the working-class and lower class are less likely to choose higher educational tracks than children from the service-class because they have other attitudes towards education, because they are more afraid of losing contact with their friends and because they feel more uncomfortable in the context of school and education in general. These attitudes and beliefs, Nash says, have been produced by the students contact with their family, teachers, peers and the wider society.

as their academic self-concepts and locus of control. Therefore, they would suggest an integration of psychological models and the rational action approaches.

Pollak (2009: 62-63) finds a weakness in the integration of the primary effects into the decision-making model that explains the secondary effects. Since the parameter p (*likelihood of success*) is supposed to be a function of student's school performance, the primary effects seem to be an inherent part of the theoretical model that is developed to explain the secondary effects. More specifically, the multiplicative association between p and B (*benefits*) yields an interaction between the primary and secondary effects. This is why it is difficult to quantify the explanatory part of each of these two effects. Further, this quantification is difficult because the primary and secondary effects influence each other reciprocally: Since the school type a student attends has an impact on his school performance, the previous choice of that school type (secondary effect) influences the performance (primary effect).

Another point of criticism is that the models do not capture teachers' role in the generation of primary and secondary effects (Pollak 2009: 62-63). As will be outlined in the following chapter, it can be supposed that teachers – consciously or unconsciously – “bias” school performance evaluations and educational decisions in accordance with student social background. Consequently, they reinforce the primary effects (if teacher evaluations are used as indicators of school performance) and the secondary effects (if teacher evaluations are used to assess students' chances of success). Further, if they make school track decisions – like in France – they directly generate the secondary effects. Erikson and Jonsson however have addressed this latter point: They mention that teachers' subjective evaluations of students' performance can capture a *middle-class bias* (Erikson and Jonsson 1996: 11-12).

Finally, it is argued that the theory is wrong in assuming that educational decisions are *spontaneously* made or made at one point in time (Ditton and Krüsken 2009). As these decisions have extremely important consequences, it is maintained, students and their parents (and even the teachers) start making their decisions years before the actual transition. In fact, Goldthorpe and Breen (1997) do take account of this fact as they argue that later educational decisions, e.g. the choice to attend university, affect earlier choices, e.g. the choice to complete secondary education. Morgan's (2002) approach takes into account families' early decision-making as he proposes that families early form *prefigurative commitments*.

3.3.2 UTILITY AND INTEGRATION

Proponents of the cultural approach and the rational action approach to social class differences in educational attainment emphasize several advantages of one approach over the other. However, some proponents of the one movement also recognize the utility of the other branch of theories and, ultimately, some develop integrations of the two approaches. This section briefly presents which advantages literature highlights and how arguments of both approaches can be combined.

In their analysis of theories of class Savage, Warde and Devine (2005) clearly confess to Bourdieu's approach to class. They appreciate that Bourdieu does not follow the economic reductionism, i.e. he does not conceptualize class through employment relations and economic exploitation. At the same time, he does not ignore the importance of economic resources as he introduces the concept of *economic capital* in his theory; economic position, however, he considers "only in its articulation with culture and politics" (Savage, Warde and Devine 2005: 41). Bourdieu refuses purely "objectivist" social science and does not intent to develop a class scheme but analyses class "as an emergent effect of the structuring of many specific fields" (Savage, Warde and Devine 2005: 42).

Another advantage that researches who "prefer" Bourdieu over Goldthorpe's RAT-approach put forward is that Bourdieu does not ignore or marginalize the importance of class culture and, thereby, of norms and values shaping the actions of individuals (Nash 2003; Savage, Warde and Devine 2005). Bourdieu's conceptualization, they maintain, is not economically reductive and does not remain descriptive, without concentrating on exploitation and different groups trying to gain relative advantages over each other. Many researchers appreciate Bourdieu's theory for emphasizing that family context is highly relevant for the explanation of social class differences in educational achievement and maintain that "Socialization-theory" – as Nash (2003: e.g. 435) calls the cultural approach – provides a set of arguments that are absolutely necessary for the explanation of social class differences in educational success.

Moreover, Bourdieu's concept of *capital* is highly valued for being original and progressive as it explains the generation and reproduction of social class and social inequality through processes of accumulation, storage and retention of advantages (Savage, Warde and Devine 2005: 43). It enables researchers to understand culture as a *resource* that provides access to scarce rewards, is subject to monopolization, and, under certain conditions, may be transmitted from one generation to the next (Lareau and Weininger 2003). Through this

conceptualization Bourdieu applies economic logic to non-economic fields such as social relationships and culture (Savage, Warde and Devine 2005). Again, this economic logic implies that individuals can accumulate, save and invest the different forms of capital. Besides, some authors value Bourdieu's emphasis on the institutionalization of the different capital types as it improves the understanding of how resources link the micro- with the macro-level (Savage, Warde and Devine 2005).

Finally, even those researchers who criticize the RAT-approach for the *methodological individualism* recognize that Bourdieu's approach is a *structural* one, meaning that it takes account of the shaping effect of social structures on individuals' actions (Nash 2003: 447). Even rigorous critics of Bourdieu find similar value in his work: they appreciate Bourdieu's "innovative" and "original" approach to the broader phenomenon of social reproduction through integrating the link between social class and educational attainment (Goldthorpe 2007a: 85, 89). Moreover, they admit that "weaker versions" of cultural theories (i.e. theories that assume that classes strongly differ with regard to their culture and that the culture of some classes positively influences school outcomes) contribute to the explanation of social class differentials in educational attainment (Goldthorpe 1996b: 488).

With regard to the advantages of the rational action approach, the literature especially emphasize advantages of RAT in general and even breaks these down to one clear and strong utility: RAT yields exact and parsimonious assumptions that can be tested empirically. This utility has made it so popular. As Kroneberg und Kalter (2012: 86) put it:

"The strengths of RCT [RAT] lie in the development of precise theoretical models that allow hypotheses to be derived and empirically tested in theory-driven research. [...], RCT [RAT] has successfully entered into and to some extent transformed the mainstream of core sociological fields of study".

Goldthorpe (1996b: 485) speaks of "the most satisfactory terminus of any sociological theory" and cites Coleman (1986: 1) who says that RAT has a "unique attractiveness" as a basis for theory because it explains action in a self-explanatory manner and one has no more questions to ask about. Similarly, Hollis (1977: 21) argues that "rational action is its own explanation". It yields very specific hypotheses and more specific hypotheses have the advantage of being more easily testable with data. Therefore, the theories they are derived from can be valued for having more "informational content", i.e. they are easier falsifiable, (Maaz et al. 2006; Need and De Jong 2002). Accordingly, the "positional theory" of Keller and Zavalloni (1964) and Boudon's adaption are valued for being parsimonious and for

enabling researchers to explain trends in social stratification in education (Goldthorpe 1996b: 490).

It appears that the number of advantages of the cultural approach outweighs that of the RAT-approach but a closer evaluation of the arguments and of the above-mentioned criticism will modify this picture. Already, integrations of ideas of both movements provide an evaluation and a preliminary conclusion: (some) theories of the cultural approach can account for the primary effects while RAT can explain the secondary effects. Integrations of both approaches differ with regard to the degree and the exact ways in which they combine their arguments but they agree on this differentiation. Moreover, it is important to note that they shift the *explanandum* from *temporal persistence* (or change) of social inequality in educational attainment to the actual generation of social inequality in educational attainment (see also Gabay-Egozi et al. 2010; Nash 2003; Van de Werfhorst and Hofstede 2007). This is the exact same research topic of this dissertation.

Van de Werfhorst and Hofstede (2007) argue that the concept of cultural capital and the idea that class differences in education emerge through cultural differences between these classes can account for the primary effects while RRA-theory (i.e. relative risk aversion-theory mainly meaning the Breen and Goldthorpe-model) can explain the secondary effects. They rely not directly on Bourdieu's theory but on a study by Kalmijn and Kraaykamp (1996) that clearly belongs to *cultural capital literature* (see Subchapter 3.1.2). The theoretical considerations in that study, Van de Werfhorst and Hofstede argue, imply that the effect of cultural capital on schooling is mainly one of cultural capital on school performance. By contrast, the theory of relative risk aversion yields no direct explanation for social class differences in school performance. One may expect that students who wish to maintain their family's social status are more ambitious and, thus, achieve better marks. However, they further say, if school performance is defined by "ability" measured in terms of scores on standardized tests, no direct effect of relative risk aversion seems plausible.

Furthermore, the authors claim that making use of cross-sectional data (and operationalizing relative risk aversion through being concerned with downward social mobility) for the analysis of the effect of aspirations on school performance bears a causality problem: If the badly performing students get more concerned this yields a negative correlation between relative risk aversion and performance. While RRA-theory seems not appropriate for explaining social class differences in performance, it seems to suit the investigation of social class effects on "ambitions" very well. The assumption that social

classes do not differ with regard to their desire of status maintenance implies that the social class effect is not *mediated* by “being concerned with downward social mobility”; the effect of this concern *adds* to the impact of social class. In contrast, according to Van de Werfhorst and Hofstede (2007: 397), the concept of cultural capital yields no direct influence of cultural resources on ambitions. They deduce from Bourdieu’s idea that cultural capital operates in “unconscious and hidden ways” and therefore that students from higher social classes have no clear educational ambitions. Hence, cultural capital is not an appropriate concept for explaining social class differences in such ambitions.

Holm and Jaeger (2008) provide another integration of the rational action and the cultural approach. They rely on the B&G-model and firstly extend it by differentiating between *instantaneous* as opposed to *future* utilities. The former type of utility includes for instance the immediate pleasure of having chosen a school track that provides general knowledge or attending university because it pleases one’s parents. *Future* utility refers to common benefits of education such as status maintenance and income or occupational prestige. Through the differentiation of *instantaneous* and *future* utility, Holm and Jaeger (2008) integrate “cultural values” in the rational action model. Their assumption of the existence of social class differences in “tastes” for educational choices contradicts the ideas beyond the model by Breen and Goldthorpe. However, to strengthen their additional argument they cite empirical analyses that find social class differences in educational values and norms (e.g. Gambetta 1987).

3.4 Evaluation and conclusion

In this final subchapter, I present the selected arguments and ideas of both approaches I adopt. To support this choice, I evaluate the criticism, advantages and empirical evidence I have outlined up to here. The core theoretical foundation of this dissertation is RAT and the educational decision-making models that were developed to explain the secondary effects (Boudon 1974; Breen and Goldthorpe 1997; Erikson and Jonsson 1996). To provide a model that is adapted to the French institutionalized dialogue between family and school, I refine a formalization advanced by Esser (1999b). I have settled for RAT because it is parsimonious and yields clear testable assumptions. Notably, as will show the hypotheses I derive in Chapter 5 and the hypotheses that previous research has tested, which will be presented in Chapter 6, RAT is a beneficial tool to derive precise and therefore testable hypotheses on the decision-making of families and teachers. I refrain from adopting strong or “narrow” versions

such as human capital theory and go for the weaker varieties that assume *subjective rationality* (see e.g. Boudon 2003).

In regard to the original theory by Bourdieu and Passeron, I agree with the critics that their arguments are very vague and partly contradictory. This clearly disqualifies it as a general theory that can be used to derive precise and testable hypotheses. However, as I investigate the actual generation and not trends of social inequality in education, I ignore the criticism that presents empirical results that contradict Bourdieu's arguments regarding *trends* in educational stratification. I rather adopt the idea that his theory or ideas of the cultural approach in general can explain the primary effects in the generation of *actual* social class differences in education (Erikson and Jonsson 1996; Nash 2003; Van de Werfhorst and Hofstede 2007). Even though it is sharply criticized for several reasons, cultural capital studies that analyze social class differences in ability and school performance show that mechanisms such as social class differences in reading behavior can contribute to the explanation of the generation of the primary effects (e.g. De Graaf 1988; De Graaf, De Graaf and Kraaykamp 2000; Kalmijn and Kraaykamp 1996; Roscigno and Ainsworth-Darnell 1999, Sullivan 2001). Moreover, I agree with the researchers who argue that subjective evaluations by teachers may contain a *middle-class bias* because schools reward abilities and behaviors that prevail in higher social classes (e.g. Erikson and Jonsson 1996: 11-12; Farkas et al. 1990; Lareau and Weininger 2003; Pollak 2009: 62-63).

Most importantly, I follow the suggestion by Lareau and Weininger (2003) and thereby advance an integration of "cultural arguments" into decision-making models that are in the RAT-tradition. I rely on two aspects: First, Lareau and Weininger's assumption that social classes differ with regard to their cultural resources to meet the standards of the school and, second, empirical evidence showing that, indeed, social classes differ with regard to their interactions with the school (see Subchapter 3.1.3). I propose that, in the French institutional context, the secondary effects on families' educational decisions are reinforced because of social class differentials in parents' cultural capital (linguistic abilities, knowledge of the educational system, self-assurance) and in parental involvement. The institutionalized dialogue between family and school and other legal regulations and promotions of parental involvement (e.g. presences of parent representatives in various important meetings, school's support of parent associations) are supposed to integrate parents in the school but at the same time they define standards that parents have to meet if they want preferable treatment for their children. For instance, schools organize regular parents' evenings and thus give parents the chance to acquire information on their children's performance. Since one of teachers'

standards is that parents are interested in their children's education (Blackledge 2001), parents who do not come to meetings may be disapproved. Finally, since cultural capital (i.e. knowledge of the educational system, abilities in dealing with school staff and familiarity with the school context) strongly influences parental involvement and varies by social class, it appears to be a key mechanism that can contribute to the explanation of social class differences within the institutionalized dialogue.

What I adopt from Bourdieu's original theory (and from cultural capital literature) is that *the culture of the school is similar to the culture of the higher social classes*. For instance, the school is supposed to teach French and therefore will give good marks to students with a broad vocabulary and the ability to build correct and meaningful sentences; since higher social classes use a more "sophisticated" language, children who are socialized in these classes are equipped with abilities that provide advantages in school. The children may participate more in class, too. Moreover, parents who have such linguistic abilities feel more confident in the school context, will communicate more with the teachers, be more involved and hence meet the standards of the school.

With respect to cultural capital literature, I agree with most of the criticism of these studies but I see considerable benefits, too. They refine the concept of cultural capital by applying operationalizations such as reading behavior and cultural knowledge and provide theoretical mechanisms that explain the link between social class, parental cultural capital, children cultural capital and educational success. Again, these works contribute to the understanding of the generation of primary effects (Van de Werfhorst and Hofstede 2007). Moreover, the finding that parental cultural capital affects (especially early) educational decisions and transitions supports my assumption that parental cultural capital and involvement contributes to the generation of the secondary effects (e.g. Aschaffenburg and Maas 1997; De Graaf 1988). For instance, these results may indicate that parents' use their cultural capital to influence teacher recommendations (see e.g. De Graaf 1988).

Finally, given the criticism that cultural capital is applied in other countries than France, one could argue that its application to the institutionalized dialogue is even more appropriate. However, I suggest that this is no additional argument for utilizing the concept of cultural capital because important reforms and political and public discussions of Bourdieu's work and social inequality of educational opportunity have raised parents' and teachers' awareness and thereby altered their behavior. For instance, teachers will not – if they have ever done so – reward students' *highbrow activities* and parents neither think that teachers will do so.

Moreover, schools' standards in France appear to correspond to standards in other countries such as Britain or the U.S. (see Blackledge 2001; Crozier 1996; Reay 2005 and Subchapter 3.1.3). At the same time, I do not assume that teachers and families are *more* aware of social inequality in education than teachers and families in most other economically advanced countries since reforms to reduce inequality were undertaken in many countries (see e.g. Erikson and Jonsson 1996 on Sweden) and inequality in educational opportunity is a topic certainly discussed in all economically advanced countries.

4 Theoretical considerations on teacher decision-making

This dissertation addresses the decision-making of two actors: families and schools. The previous chapter has evaluated a cultural and a rational action approach to social inequality in education in the light of families' decision-making. The present chapter focuses on theoretical considerations on teacher decision-making. More specifically, it summarizes theoretical arguments that have been put forward in previous studies on teachers' school track decisions and grading-behavior. On the one hand, there are researchers who – as Bourdieu and his colleagues – take a more “conflict-theoretical” perspective and assume that teachers act as *gatekeepers*; on the other hand, there is less “normative” literature that explores the determinants of teacher decisions. This chapter gives a brief overview over these arguments in order to provide a theoretical foundation for the teacher decision-making model that will be developed in Chapter 5.

4.1 Cultural capital and non-cognitive traits

In the original work by Bourdieu and Passeron, it is argued that when teachers assess the performance of students, they just rate the distance of the student's “culture” to the culture of the school (Bourdieu and Passeron 1964: 39). Moreover, there are hints at the existence of a *teacher bias* or a *middle-class bias*, i.e. a social class effect net of student ability on subjective performance assessments by teachers. Bourdieu claims that, in every stage of a student's educational career, teachers will – consciously or unconsciously – take the linguistic aptitudes of the student into account (Bourdieu 1966: 330). Further, teacher assessments are – most often unconsciously – affected by “little perceptions”, i.e. indicators of student's social origin such as physical bearing and vesture, style of expression and accent (1966: 338). Also, when giving advices on educational decisions, teachers take into account student's social origin (Bourdieu 1966: 331).

Teachers conceal how they make marks and they devaluate how to acquire good ones (Bourdieu and Passeron 1964: 96). By this way, teachers reinforce lower class students' feelings of powerlessness, arbitrariness and predestination to failure. Furthermore, teachers require a language and culture that only students of higher social origin master and this common language and culture creates a sort of “complicity” between students of higher social origin and the school staff (Bourdieu 1966: 339). As the teachers (and students) pretend that this communication and complicity does not depend on social origin but on “talents” and

“intelligence”, the teachers do not have to make the effort to take account of the needs of poorly performing students. For the same reason they do not perceive it as unfair that the evaluation criteria are based on the “elite culture”.

Numerous studies that analyze *middle-class biases* in subjective evaluations by teachers (e.g. marks) directly refer to Bourdieu or to other arguments of the cultural approach (e.g. Ditton 2007; Ditton and Krüsken 2006; Rolff 2007; Stahl 2007). They argue that teachers act in the interest of the dominant social classes: Teachers function as *gatekeepers* who keep students of lower social origin from following educational pathways that lead to higher social class positions. They do so by giving better marks or higher school track recommendations to students from higher social classes even when they actually perform the same as students from lower classes. Teachers are not absolutely supposed to do so consciously. In fact, it is argued, they take into account students’ *cultural capital* and since the school’s culture resembles the culture of the higher classes, they give better marks to students from higher classes. Typically, regressions of teacher performance assessments on student social origin, objective measures of ability and cultural capital variables (e.g. highbrow activities, reading behavior) analyze this line of thoughts (e.g. DiMaggio 1982). However, as pointed out in Chapter 3, some critics argue that this is not an appropriate approach because Bourdieu’s theory yields that “objective” ability and cultural capital cannot be separated (see e.g. Lareau and Weininger 2003 and Subchapter 3.1.2).

Not all researchers who conduct such regression analyses intend to test Bourdieu’s theory. The seminal work by Bowles and Gintis (1976) gave rise to similar – particularly U.S. – studies. Bowles and Gintis argue that intergenerational social class reproduction is driven by differential socialization of behaviors in school and that these behaviors – typically termed as “non-cognitive traits” – are more rewarded by teachers and employers than cognitive skills. The required non-cognitive traits generally consist of work habits that enable individuals and organizations to function efficiently (e.g. focusing on task at hand, being energetic) and they vary by skill level. At higher skill levels of the organizations (e.g. in general secondary schools or high-skills occupational positions) teachers and employers reward especially “initiative under control of internalized behavior” and creativity; at lower skill levels more emphasis is put on keeping rules and respecting authority (Farkas 2003: 541).

Empirical analyses found that teachers reward habits and traits such as perseverance, dependability, docility, consistency, homework completion, participation in class, effort and organization (e.g. Bowles and Gintis 1976; Bressoux and Pansu 2003; Ditton and Krüsken

2006; Farkas et al. 1990; Rosenbaum 2001; see also Maaz and Nagy 2009 for effects on different subjects). As predicted by Bowles and Gintis (1976), these non-cognitive traits explain very large parts of social class effects and effects of gender or ethnicity on marks and other subjective teacher evaluations, *net of cognitive skills* (measured e.g. through standardized test scores). Some studies also found that teachers' own social origin plays an important role: teachers of higher social origin are more likely to reward such traits than teachers with lower social background (e.g. Alexander, Entwisle and Thompson 1987). It is argued that the "social distance" between teacher origin and student origin makes the communication more difficult and creates an atmosphere that derogates lower-class students' learning.⁴⁸

4.2 Determinants of teacher school track decisions

Making school track decisions is a complex, responsible and demanding task (Arnold et al. 2007; McElvany 2009). Within an institutional framework defined by legal regulations, the teacher has to collect and process diverse information on his students, at best over years. Based on this information, he has to prognosticate the student's future performance development. Moreover, teachers are supposed to make their decisions in *rational* ways since they further have to evaluate costs, benefits and risks; wrong judgments can cause costs for the student, the educational system and the society (Arnold et al 2007; McElvany 2009).⁴⁹

The factor that is uniformly expected to have the greatest impact on teacher recommendations is a *student's marks*. Following SEU-theory, teachers consider students' marks as they indicate their chances of successfully completing different school tracks (Neugebauer 2010). Consequently, teachers perceive the making of recommendations for students with performances in the middle range as very difficult (Ditton and Krüsken 2006). Another reason advanced in the literature is that law and other official regulations explicitly

⁴⁸ This result could be interpreted as support for Bourdieu's theory: He argues that teachers find it convenient to evaluate student's performance with the "culture of the elites" as a yardstick because the teachers belong to the "elite" (Bourdieu and Passeron 1964: 39, Bourdieu 1966: 337-388). Throughout their work, Bourdieu and Passeron emphasize that teachers are influenced by their own social origin and by the social class position they attained through their occupation. They embody the school success and take their own knowledge and skills as natural "talents" although they have laboriously acquired them. As they often originate from the middle class, they are even more attached to the norms and values of the school system (Bourdieu and Passeron 1964: 107). They owe their social success and position to the educational system and therefore they tend to adopt its values with more vigor (Bourdieu 1966: 337, see also 1979: 96).

⁴⁹ Indeed, it was found that German primary school teachers perceive the making of the secondary school track recommendation as difficult and sometimes doubt the correctness of their decision (McElvany 2009). However, teacher personality traits such as a high "belief of self-efficiency" and a high perception of freedom of choice have a negative effect on teacher's perception of the decision-making as being difficult and burdensome.

require the teachers to base their recommendation upon student's academic performance (e.g. Neugebauer 2010; Schneider 2011).

Similar to the arguments advanced in the literature dealing with *middle-class biases* in marks and other performance evaluations (see Subchapter 4.1), researchers investigating teacher school track recommendations argue that teachers take into account student behavior, linguistic and other more or less school relevant abilities, attitudes towards education in general and learning as well as interest in the subjects taught in school (e.g. Ditton and Krüsken 2006; Schneider 2011; Neugebauer 2010). This may be because legal texts require them to take into account students' "aptitude, will and affinity for intellectual labor" (Schneider 2011: 373). Students' linguistic and other "academic" abilities, participation in class and schoolwork mastery may reflect the required aptitudes and affinity; motivation and effort certainly manifest students' "will". Accordingly, it was found that teacher reports of students' participation in class and motivation strongly affect school track recommendations (Ditton and Krüsken 2006). Moreover, following again SEU-theory, teachers may use such "school-relevant" behavior, abilities and attitudes as indicators of students' chances of success (Neugebauer 2010).

Another distinct factor that is expected to influence teacher decisions is parents' capacity to support their children with regard to educational issues (Ditton 1992; Ditton, Krüsken and Schauenberg 1995; Ditton and Krüsken 2006; Duru-Bellat 1996; Duru-Bellat 2002: 80; Neugebauer 2010; Schneider 2011). Teachers consider whether a student can be helped with her homework by her parents or other family members, whether at home she can discuss her problems in school, whether the family can account for private coaching, and so on. Apart from marks and work-habits, this factor is supposed to indicate to teachers the likelihood that a student will succeed in different school tracks.

As a fourth determinant of teacher decisions, German studies dealing with teacher recommendations mention parental aspirations (Arnold et al. 2007; Ditton and Krüsken 2006; Schneider 2011). It is argued that parents who aspire after their child's attending the higher secondary school track and who soon recognize that the child may not have good enough marks to get the corresponding recommendation put pressure on the teachers. In terms of SEU-theory, it can be assumed that the pressure by parents represents costs to the teachers (Ditton 2007: 252). Moreover, parents' and students' aspirations may directly influence teacher decisions since legal regulations require them to take into account students' "will" (Schneider 2011). In France, before the implementation of the dialogue – i.e. when teachers

still had full decision-making power – parents’ aspirations were supposed to have a strong influence on students’ transitions to secondary school. Girard and Bastide (1963) argued that parents’ aspirations are, in addition to student performance and teacher evaluations, one of three factors that determine which secondary school track a student will attend. Today, within the French dialogue, families’ official school track requests *formalize* families’ aspirations and legal texts and the administrative authorities strongly encourage teachers and headmasters to consider families’ requests (Duru-Bellat and Mingat 1989; Duru-Bellat, Jarousse and Mingat 1993; see also Chapter 2).

Another factor that is supposed to have an influence on teachers’ school track decisions is the number of available places in surrounding (upper) secondary schools and firms that provide apprenticeships. This fifth determinant plays an important role in literature on the transition from lower to upper secondary education in France and is mentioned in research on other countries, too (see Ditton 2007: 252; Ditton and Krüsken 2009: 78). In France, teachers and especially headmasters are well informed about available places in surrounding general upper secondary schools (*lycée général et technologique*), vocational upper secondary schools (*lycée professionnel*) and firms that provide apprenticeships (Briand and Chapoulie 1993; Masson 1997). When they help children to work out their educational plans and when they make school track propositions, they consider whether students’ educational plans are realizable under the given circumstances. This leads to regional difference in transition rates and – as will be explained below – to varying social class effects on these transitions (e.g. Ballion 1986; Duru-Bellat 1996; Duru-Bellat 2002: 103-104; Duru-Bellat and Mingat 1988; Duru-Bellat and Mingat 1989; Duru-Bellat, Jarousse and Mingat 1993): On the one hand, in regions with strong industrial or agricultural sectors (i.e. mostly rural regions), this leads to comparatively high rates of student transitions into vocational tracks; on the other hand, in urban areas with more and larger general upper secondary schools (which are often locally affiliated to lower secondary schools), students are comparatively more likely to attend the general track. Moreover, it is argued that the impact of surrounding available places is reinforced because they affect also families’ aspirations and students further influence each other’s aspirations (Duru-Bellat 1996; Duru-Bellat 2002: 103-104). This mechanism leads to regional effects and school effects on educational decisions.

Given teachers do factor in these five determinants – marks and other performance indicators, non-cognitive (more or less school-relevant traits), parents’ capacities and resources to support their child’s schooling, parents’ (formalized) aspirations and places in surrounding schools – how do social class differentials in teachers’ school track decisions

emerge? First, social class differences in students' marks correspond to the primary effects. Moreover, since marks are affected by *middle-classes biases*, too, social class effects may even be reinforced (Erikson and Jonsson 1996; Pollak 2009).⁵⁰ Second, class-specific socialization generates social class differences in students' linguistic abilities, behavior in school and other non-cognitive traits and since teachers take into account these factors, social class effects on teacher decisions emerge and remain even when marks are controlled. Third, as shown by studies dealing with family-school interactions (see Subchapter 3.1.3), social classes vary with regard to their capacities to help their children with school issues. Hence, if teachers consider students' social class to assess these parental capacities, net social class effects on their decisions emerge (Duru-Bellat 2002: 80; Duru-Bellat 1996). Fourth, for "cultural" as well as for "rational" reasons higher social classes have higher educational aspirations (see Chapter 3). Therefore, since teachers (and headmasters) directly take into account parents' (formalized) aspirations and parents with high aspirations may put more pressure on teachers, student social class affects school staffs' decisions. Fifth, since given few places in surrounding general upper secondary schools and many places in vocational schools or apprenticeships providing firms, teachers and headmasters are less likely to propose the general track to lower class students, net social effects are stronger in rural regions than in urban areas. However, regional and school variations were found to explain little of individual social class effects on students' transitions to upper secondary education; individual factors (i.e. the four other determinants) seem more important (see Duru-Bellat and Mingat 1989).

4.3 Theories of discrimination

Within German research on teacher recommendations, studies dealing with the impact of student's immigration and social class background have started to apply *theories of*

⁵⁰ Maaz and Nagy (2009) provide an adaption of the concept of primary and secondary effects to the German case. In Germany, the transition from primary to secondary school is affected by school track recommendations of the primary school teachers that families are advised to take into account when they decide on the secondary school track their children will attend. Maaz and Nagy (2009: 160) differentiate six types of effects: First, primary effects on marks (social class effects that are fully mediated by student's actual performance); second, primary effects on the teacher recommendation (social class effects that are fully mediated by student's actual performance); third, secondary effects on marks (social class effects that remain when student's actual performance is controlled); fourth, secondary effects on teacher recommendations (social class effects that remain when student's actual performance is controlled); fifth, primary effects on actual enrollment meaning parent's school track decision (social class effects that are fully mediated by student's actual performance); sixth, secondary effects on actual enrollment meaning parent's school track decision (social class effects that remain when student's actual performance is controlled).

discrimination to teachers' decision-making (see e.g. Kristen 2006; Schneider 2011). Discrimination occurs in many different aspects of society, e.g. in intermarriage and residential location (Arrow 1998: 91). In economics, researchers speak of "discrimination in the labor market" when employers hire or pay employees not only because of their productivity but (also) depending on ascriptive traits such as gender or ethnicity. In terms of quantitative analysis, discrimination exists when members of two different social groups (e.g. men and women) receive unequal wages, are hired at different chances, etc., even after adjusting for observable differentials in human capital and other "productivity"-indicators (Arrow 1998: 94).

To explain this phenomenon, two theories of discrimination are mentioned: The *theory of statistical discrimination* (Arrow 1973; Phelps 1972) and the *theory of discrimination preferences* (Becker 1971). The former assumes that employers, for instance, will discriminate against women or blacks if they believe that they are, on average, less productive, less qualified, etc. (Phelps 1972: 659). They are individuals who seek to maximize utility and hence if the costs of gaining information about the person they want to hire are very high, they will refrain from looking for that information and rely on their "statistical experience".⁵¹ The *theory of discrimination preferences* by Becker assumes that individuals' discrimination-behavior is driven by their preference in favor or against certain social groups. Prominently, this preference is termed "taste for discrimination" (Becker 1971). Becker does not specify through which mechanisms individuals adopt such preferences; he introduces them as *exogenous* factors (Kristen 2006: 82). As an example, speaking of ethnic discrimination, Arrow (1998: 94) refers to "some special disutility, which whites attach to contact with blacks". He criticizes Becker's theory for directly contradicting the basic assumption that employers are "simple profit maximizers" (Arrow 1998: 94).

Applications of the *theory of statistical discrimination* to teachers' making of decisions such as secondary school track propositions consider that individuals are assumed to make use of their "statistical experience" when they lack information and when acquiring information is costly (Kristen 2006; Schneider 2011). This is the case when teachers do not know a student at all. Such situation occurs, for instance, when teachers have to decide whether a new student is "good enough" to be accepted at a school that requires minimum levels of performance and ability. By contrast, when teachers decide on a school track a

⁵¹ This experience might be based, for instance, on employers' observation that blacks and women are typically less likely to be hired or paid lower incomes (Phelps 1972: 659) or his or her own "actual" experience that blacks or women are, on average, less productive (Arrow 1973: 96).

student should attend, they usually know the student very well. Therefore, it is assumed that *statistical discrimination* will not affect teacher school track decisions (Kristen 2006; Schneider 2011). However, *tastes for discrimination* appear to be likely to cause teachers to recommend higher secondary schools to students of one social group (e.g. students with higher social origin) rather than to students from the other social group (e.g. lower social classes). While employers only want to maximize the profit of their company and, as Arrow puts forward, seem not likely to follow discrimination preferences, teachers might be, according to Kristen (2006: 83, 94), more likely to follow discrimination preferences.

4.4 Evaluation and conclusion

This chapter has described theoretical approaches to teacher decision-making that are mainly concerned with explaining why student social class affects teacher decisions even when school performance is controlled. The common perception of the presented approaches is that the net social class effect emerge because teachers take into account more or less “meritocratic” student traits such as linguistic abilities, docile behavior, effort, work habits and background characteristics (e.g. parental support) that are related to student social class origin. However, the approaches differ with regard to the explanations they propose for this teacher behavior. While “cultural” theories argue that teachers act as *gatekeepers* and quite unconsciously select students with “high-status signals” (e.g. linguistic ability) into higher school tracks because these students “fit in” schools’ culture, other theories provide more “rational” arguments such as: teachers take into account student traits that indicate students’ chances of succeeding in the different available school tracks. The latter theories also argue that parent educational aspirations influence teacher decisions and thereby these theories indicate that teachers try to avoid costs such as conflicts with ambitious parents. As I reason in Chapter 3, parents indeed attempt to meet school standards to get teachers to act in their will. Moreover, since higher-class parents are better equipped with abilities and knowledge that enable them to meet these standards, their aspirations are more considered by the teachers than lower-class parents’ aspirations. Hence, student social class affects teacher decisions even when student achievement is taken into account.

In the specific context of the institutionalized dialogue between family and school, this mechanism – parents with high aspirations influence teacher decisions – can be supposed to be very important. This is because teachers (i.e. the staff meeting) make a school track proposition that can be rejected only with some effort (attendance at talk with headmaster).

Given these institutional circumstances, parents who want their child to attend the general upper secondary school track have to find ways to affect the staff meeting's proposition. One preliminary way is of course their school track request since this formal declaration clearly indicates parents' educational aspirations. However, as the above-presented theories argue, teacher decisions are not only affected by parents' and students' aspirations: Since teachers mainly seek to evaluate a student's chances of success, they consider student performance and other "future-performance indicators" such as parental support. Therefore, I propose that in the context of the dialogue parents put effort in showing teachers their ability and willingness to support their children. Finally, this parental preparatory behavior is reinforced because the dialogue is embedded in a context that formally promotes parental involvement (e.g. through regular parents' evenings, parent associations).

With regard to discrimination theories, I suppose that no *statistical discrimination* affects teacher decisions within the French institutionalized dialogue. As argued in the literature, teachers only take into account ascriptive student traits such as social origin when they lack information on the student. However, in the context of the dialogue, the teachers in the staff meeting very well know their students since they taught them in class in the years before. By contrast, teachers' *tastes for discrimination* could still be at work. Yet, since there is no detailed explanation for the mechanisms behind these tastes and since they seem not in line with the idea of teachers' rational action behavior, they seem no powerful theoretical approach to explain teacher decisions within the dialogue.

Given this preliminary theoretical reasoning on teacher decision-making and the arguments on families' decision-making developed in Chapter 3, the following chapter designs a detailed theoretical approach to families' and teachers' decision-making within the institutionalized dialogue. More specifically, the approach will separately address each step of the dialogue: family's school track request, staff meeting's subsequent school track proposition, family's decision to reject the staff meeting's proposition, the headmaster's decision that follows from family's rejection, family's decision to reject also the headmaster's decision and finally the decision of the recall meeting.

5 Decision-making within the institutionalized dialogue

Henceforth, I develop two theoretical models based on Subjective Expected Utility (SEU) Theory that explain how social class differentials emerge in families' school track requests and staff meetings' school track propositions. Subsequently, I apply these models to investigate social class effects on families' rejection decisions and both actors' grade retention decisions. The formalized models concentrate on the most popular school track: the general upper secondary school track (LGT). I focus on the situation in which the actors have the two mutually exclusive alternatives (1) LGT or (2) *not* LGT; the second alternative includes the two vocational tracks (LP and A) and grade repetition (GR).⁵² I have settled for mathematical formalization in order to provide a clear overview over the parameters I add to the existing rational decision-making model. Moreover, mathematical formalization facilitates the logical deduction of hypotheses, augments the explanatory power of the theory and facilitates empirical testing (Diekmann and Voss 2004: 19; Kroneberg and Kalter 2012: 75).⁵³

⁵² LGT means *lycée général et technologique*, LP stands for *lycée professionnel*, A indicates apprenticeship (i.e. the track that leads to the certificates CAP and BEP) and GR means grade retention. For purposes of simplicity and in line with the empirical analysis that follows, I will speak of *one* vocational track and not differentiate between the higher vocational track (LP) and the lower vocational track (A).

⁵³ Subjective Expected Utility (SEU) Theory is one variation of rational action theory (RAT). As emphasized by Diekmann and Voss (2004), SEU-theory is *not* identically equal to RAT as it is sometimes perceived in the literature. It is a specific decision theory and hence another variety of RAT. The father of SEU-theory is the statistician Leonard J. Savage (1954). He refined the "expected utility theory" of von Neumann and Morgenstern (1944). As for all "decision rules" or decision theories, the *explanandum* is a specific action of an individual (Esser 1999b: 251-259) and the aim of the theory is to model normatively the way in which individuals make a choice among uncertain *alternatives* (Duncan Luce 1992). To do so, researchers assume that an actor considers all the – mutually exclusive – alternatives he could choose. The alternatives can consist of all sorts of actions including to *not* act, to endure, to perceive, to communicate, to act "internally" or "externally", to learn, to imitate, and so on. With each alternative the actor associates *consequences* and to each of these consequences she assigns *subjective values*. The consequences that are assigned with positive values are labeled *utility* or *benefits*; consequences that are ascribed with negative values are labeled negative utilities or *costs*. Actually, the consequences could be assigned with *objective* values. However, as a matter of course, individuals differ with regard to the degree to which their subjective evaluation corresponds to the actual objective value. The "subjective utility function" describes the relationship between the objective and subjective values; it represents an individual's utilization of information (Esser 1999b; Diekmann and Voss 2004: 17). Another crucial parameter in the SEU-theory is the *expectation*. This is the subjectively expected probability that a specific consequence will occur. As they are probabilities, expectations can range from 0 to 1; 0 means that the specific consequence (cost or benefit) will not emerge and 1 indicates that it will. The expectations tell the actors how probable it is that a specific alternative leads to a specific positive or negative utility. Again, there is the actual or *objective* probability that a utility will occur and the more or less deviating *subjective* expectation. For every alternative the actor multiplies the positive and negative utilities with the corresponding expectations. By this way, he obtains a "subjectively expected utility-value" for every alternative. Finally, the actor selects the alternative that promises the highest expected utility. That is to say, the actor chooses an action so as to *maximize* the subjective expected utility.

5.1 Family's decision-making

5.1.1 INDEPENDENT DECISION-MAKING: THE MODEL BY ESSER

To develop a model on families' making of their school track requests in the context of the institutionalized dialogue, I refine the SEU-model on educational decision-making that has been advanced by Esser (1999b). It is a variation of the models by Breen and Goldthorpe and Erikson and Jonsson that is more general and that puts emphasis on the status maintenance motive by introducing distinct parameters (Becker and Hecken 2009b). I have chosen Esser's model since it is more parsimonious than the formalized model by Breen and Goldthorpe (1997) even so it is more detailed than the model by Erikson and Jonsson (1996).

According to Esser (1999b: 266-272), the family considers the following consequences or *utilities* of choosing LGT: direct and indirect costs of further general education C (books and other learning material, longer duration of the education, foregone earnings, etc.), the benefit B of it (satisfaction of general learning, access to diplomas that lead to higher class positions, higher levels of income etc.) and costs of status decline SD . This negative utility labeled with " SD " represents the *possible* loss of social appreciation and self-esteem that emerges when the child does not preserve the family's social class position. Depending on family's social class these costs can be zero or more. Besides, families assess two kinds of expectations: p , the probability that the child will successfully complete the chosen school track (here the general track) and c , the probability that in case the child does not succeed in the general track, the family will face the costs of status decline.

The costs of status decline and the probability of its emergence correspond to the notion of "relative risk aversion" and the ideas adopted from Keller and Zavalloni's (1964) "positional theory" that are integrated in Boudon, Erikson and Jonsson and Breen and Goldthorpes' approaches: Students and their parents evaluate their educational options and the benefits of these with the family's social class position as a yardstick. Hence, higher class families have more to lose from having children not following the higher school tracks than lower class families who might have nothing to lose at all (Boudon, 1974; Erikson & Jonsson, 1996: 27 f.). Put differently, given the same desire to maintain one's family's social status, completing the vocational track would satisfy a working class family, for instance, but not one from the service class. Esser's model and the B&G-model put considerably more emphasis on the motive of status maintenance than the E&J-model (Becker 2000) and the main difference between Esser's model and that of Breen and Goldthorpe is that Esser "specifically provides

for an effect on educational choice of parental concern to minimize the risk of children’s downward mobility” (Goldthorpe 2007a: 269; see also Becker 2000; Kristen 1999).

I make use of Esser’s (1999b) model in order to formalize a family’s subjectively expected utility of choosing LGT. Equation 1a, 1b and 1c address an *independent* decision-making of the family, i.e. how they would make their school track choice if they were the only one to decide and hence not dependent on the decision of the school. The subscript *F* generally stands for family’s decision-making and “LGT” in parentheses indicates that the evaluated option is the general upper secondary school track.⁵⁴

Families’ choosing LGT yields the following SEU (see Esser 1999b: 267):

$$SEU_F(LGT) = pB + (1 - p) c (-SD) - C \quad (1a)$$

The expectation *c* is a weight that is attached to the costs *SD*. It tells the family how likely it is that the certain amount of costs of social decline will occur and, hence, it indicates how “necessary” it is that a child completes the general track in order to maintain the family’s social status. Whether the family will experience these weighted costs of status decline also depends on the probability that the child fails in the general track ($1 - p$). In turn, whether it will receive the benefits *B* depends on *p*, the child’s chances of successfully completing the general track. The general costs of the child’s attendance at the general track occur in any case.

Equation 1b formalizes a family’s SEU of *not* choosing LGT. Then, only the weighted costs of status decline are important (see Esser 1999b: 267):

$$SEU_F(notLGT) = c (-SD) \quad (1b)$$

The family chooses the alternative that yields the higher SEU-value. Hence, if there was no institutionalized dialogue and the family could make an *independent* decision, they would choose the general track if

$$SEU_F(LGT) > SEU_F(notLGT) \quad (1c)$$

⁵⁴ As outlined in Subchapter 2.5.5, Becker’s (2000) theoretical suggestion of dividing families’ decision-making into two “sub-processes” resembles that approach. He suggests that a first “sub-process” generates families’ *educational intentions* and a second “sub-process” produces their actual educational decisions. The latter are affected by institutional circumstances which he such as teacher recommendations. Within the French institutionalized dialogue families’ decision-making is affected by the institutional context of the dialogue (e.g. the fact that the staff meeting subsequently makes a virtually binding decision).

Moreover, Esser (1999b: 269-272) brings “face to face” Equation 1a and Equation 1b (or, correspondingly, states Equation 1c in more detail) and after mathematical transformation he obtains:⁵⁵

$$B + cSV > C/p \quad (1d)$$

He terms the left part of Equation 1d “educational motivation” and the right part is labeled “investment risk”. The educational motivation increases as the weighted costs of status decline and the benefit of attending the general track increase. Given the same costs of attending the general track, the investment risk increases as students’ likelihood of success decreases. Equation 1d further yields assumptions on the likelihood that families choose LGT over “not LGT”: As the chances of success (p) decrease (i.e. the investment risk increases, if C would remain the same), the educational motivation and the benefits (B) must increase so as to keep the likelihood-level of choosing LGT. For example, if a student’s chances of succeeding in the general track are very low, his family must have a very high educational motivation so as to still opt for LGT (see also the figure presented in Esser 1999b: 271). This demonstration of how *only* the likelihood of success and the weighted costs of status decline (or, formulated in positive terms, the educational motivation) could produce differences in educational decisions reveals the central importance of the status maintenance motive in Esser’s model. The costs C and benefits B only *add* to the differences.

5.1.2 FAMILY’S SCHOOL TRACK REQUEST

To adapt this preliminary model to the institutionalized dialogue between family and school, another parameter has to be added which I denote with l . It stands for family’s *subjectively expected likelihood that the staff meeting will propose the general track* as well. A family additionally anticipates what decision the school staff will make since the utility they associate with having their child attend the general track ($SEU_F(LGT)$) depends on whether the staff meeting agrees with their request. Since the school has the final word, whether the family will benefit from having their child attend the general track, whether it will have to account for the costs of education and for those of status decline depends on whether the school staff opts for the general track. The following equation *reformalizes* families’ SEU of choosing the general school track:⁵⁶

$$SEU_F(LGT) = l [pB + (1 - p) c (-SD) - C] + (1 - l) [c (-SD)] \quad (2)$$

⁵⁵ For more details on the reformulation see Esser (1999b: 269-270).

⁵⁶ Like the other small letters, the parameter l represents a probability that determines the emergence of positive or negative utilities (usually signified by capital letters). It can range from 0 to 1.

Equation 2 explicates that the benefits of education (i.e. status maintenance and benefits such as joy of learning) do not only depend on the chances that the student will successfully complete the general track, but on the likelihood that the teachers let the student attend the general track, too. For instance, if l equals 0, a student that would successfully complete the general track ($p = 1$) will never benefit from that success since the teachers will not have let him attend that track. The second part of the equation implies that even if the staff meeting agrees with sending the student to LGT, the family will experience the costs of status decline if the student fails ($p = 0$). The costs C of attending the general track only emerge if the staff meeting admits the student to the general track. Benefits of attending the general track depend in the same ways on l but on having success in the general track (p), too. The last part of the equation implies that, if the staff meeting does not opt for the general track ($1 - l$), the family will experience downward social mobility even if the student would have been able to succeed in the general track ($p = 1$).⁵⁷

According to studies dealing with educational decision-making, p is generally a function of typical school performance indicators such as student's marks (e.g. Jonsson 1999; Breen & Yaish 2006), number of repeated school years (Roux and Davailon 2001), scores on standardized tests (e.g. Breen and Yaish 2006; Jonsson 1999; Van der Werfhorst and Hofstede 2007) or teacher recommendations (e.g. Becker 2003; Stocké 2007). This means that parents use these indicators as information to subjectively evaluate p .⁵⁸

The expectation c , i.e. the likelihood of status decline if the student does not complete the general track, is a function of family's social class. To assess whether their children's completion of the general school track will cause status decline, families estimate whether the

⁵⁷ Moreover, if the staff meeting does not propose LGT, the family might experience "psychological costs" because of being rejected – to some families being rejected could demonstrate a mismatch of the teachers' and their own perceptions of the student's abilities and this could irritate some families severely. I do not suggest that such anticipated psychological stress causes strong social class differentials in families' school track request. Since these costs are of minor importance they are not integrated in the equation.

⁵⁸ There may be "biases" in the subjective assessments of parents such as higher-class parents perceive the same marks as higher chances of success than lower-class parents would perceive the same marks, but I assume such biases to be very small. Given the fact that SEU-theory specifically considers that individuals may differ with regard to their *subjective* evaluation of the same *objective* information, such an assumption may seem inappropriate. However, empirical evidence obtained by direct tests of the rational action approaches reveal that no significant social class effects on families' subjective evaluation of their children's chances of success remain when objective indicators such as marks and teacher recommendations are controlled (Stocké 2007).

educational attainment the child will acquire through the specific school track (here, the general track) is necessary for maintaining the family's social class position.⁵⁹

As families were found to feel unaware about the precise factors on which the staff meeting bases their school track decisions (Masson 1997), I assume that parents can only make use of school performance indicators that are *visible* to both actors the families and the school staff. Hence, they consider indicators such as marks and repeated school years not only to assess *p*, but to estimate *l*, too. Regardless of their own perception of their child's performance and likelihood of success, they assume: the better the child's marks and other visible performance indicators, the higher is the probability that the staff meeting agrees with their request of sending the child to the general track.

Moreover, as suggested by Lareau and Weininger (2003) and supported by a range of quantitative and qualitative studies (see Subchapter 3.1.3), parents "strategically" use their *cultural capital* (e.g. knowledge of the educational system, linguistic abilities, self-confidence in the school context). Therefore, *l* is also determined by additional effort parents have put into talking to school staff, telling the teachers what school track they want their child to attend, and their *visible* involvement in their child's schooling (e.g. parent association-membership, attendance at parents' evenings, initiation of meetings with teachers). The parents assume that the more involved they are and the better they have utilized their *cultural capital* (e.g. in talks with teachers), the more likely it is that the staff meeting will accept their LGT-request. Parents who are involved in school (e.g. as parent representative) think that the teachers consider them to be very interested in their child's schooling and to have the capacities and resources to help and practice with them. In brief, involved parents assume that they *meet the school's standards* and therefore will receive preferable treatment. Moreover, parents who are member in a parent association (PA) may be persuaded that the staff meeting will accept their school track request because either the parent representatives (who mostly represent a PA) or the parents themselves will attend the staff meeting (see Subchapter 2.3.2). Also, some parents may have put pressure on the teachers when talking to them (e.g. by saying that they will reject the staff meeting's proposition) and now believe that the teachers

⁵⁹ Evaluating whether the general track will lead to an occupation that preserves the family's social status is a difficult task for students (Breen and Yaish 2006; Jacob and Tieben 2009). However, since the upper secondary school track choice takes place early in a student's school career and does not *fix* the way to occupations of a certain status (like tertiary education choices or even *bac* type – "S", "ES", and "L" – would), I assume that, at that stage, students know enough to estimate whether the general track will preserve a family's social status. Moreover, they can use their parents' educational attainment as yardstick (Jacob and Tieben 2009) and their parents – who might better know the labor market value of different educational attainments – take the decision together with them.

will decide in their interest (see e.g. Masson 1997). Finally, regarding the function of l , I suggest that a family first considers the student's marks (and repeated grades) and if these are in the middle range and therefore the family is unsure about l , it additionally factors in parents' involvement and cultural capital.⁶⁰

5.1.3 FAMILY'S REJECTION DECISIONS

When families decide whether they want to reject the staff meeting's proposition, they evaluate an additional parameter: the *costs of rejection*. These costs consist of filling in the dossier and, most importantly, of going to the school and talking with the headmaster. For the parents, this may be time and money consuming and, most importantly, for some parents this may be psychologically stressful. As the literature on family-school interactions reveals (see Subchapter 3.1.3), some parents feel uncomfortable in the school context and prefer to avoid talking with school staff. Talking to the head of the school may bother them even more than communicating with the teachers. Hence, all families face the same costs of rejection but some families *subjectively* perceive them as greater than they are. However, I suggest that this factor plays only a minor role when families decide about rejecting.

Although the costs and benefits of having their child attend LGT are exogenous and remain the same, the parents might *reevaluate* p since now they know the staff meeting's school track proposition. This implies that p is now a function of marks, repeated school years *and* the staff meeting's proposition. Moreover, families also differently evaluate l – the likelihood that in the subsequent decision the school will accept the LGT-request – because the headmaster instead of the staff meeting takes this decision. This time, parents might take less account of the meetings they have initiated with teachers since the headmaster did not attend these meetings and might even not know about them. By contrast, their membership in a PA is still very importance since the headmaster usually knows which parents are engaged in that way.⁶¹

Families' making of their decision to reject the decision of the headmaster is slightly different. As compared to the first rejection, families do not have the same costs of rejection: They do not have to talk with the headmaster but they have to make an official demand via a

⁶⁰ Another factor that parents may take into account is their *social capital* in terms of personal relations to teachers, the headmaster or other members of the staff meeting (see Coleman 1988). However, I suppose that this determinant is of minor relevance because the number of parents with such specific *personal* contacts must be small.

⁶¹ However, as parents who are PA-members are very likely to receive a staff meetings' proposition that corresponds to their request, I assume that very few parents who are PA-members have to think about rejecting. Marks might play a minor role or even no role at all since these already have been considered by the staff meeting and are captured by their proposition.

letter to the minister and they typically have to attend the recall meeting (see Subchapter 2.3.1). Like the talk with the headmaster, some families may perceive attending the recall meeting as psychologically stressful. It appears that it is difficult for a family to assess whether the recall meeting will accept their request (i.e. the expectation l) because they do not know the members of the recall meeting (e.g. external teachers). However, since the concerned student and her parents are typically present in the recall meeting, I assume that families who reject a second time assess their abilities to persuade the other members of the recall meeting. Therefore, I suggest that when assessing l , the parents take into account their cultural capital in terms of linguistic abilities, knowledge of the educational system and self-assurance in such a specific school context.

The impact of future expectancies on actual decisions

In fact, a family's school track request may be affected by their evaluation of their future rejection decisions. That is to say, when a family makes its request, it already considers its chances to persuade the headmaster and the recall meeting. These future expectancies can be integrated in the model on families' request: When the staff meeting does not agree with a family's LGT-request (i.e. $1 - l$), the weighted costs of status decline ($c * SD$) only emerge if:

- the family does not reject;
- the family rejects, the headmaster does not accept the LGT-request and the family does not reject the headmaster's decision;
- the family rejects, the headmaster does not accept the LGT-request, the family rejects the headmaster's decision and the recall meeting does neither accept the LGT-request.

Therefore, when families make their school track request, they also have to assess their chances to persuade the headmaster and possibly the recall meeting. This reasoning yields a complex SEU-function since the evaluation of these expectancies becomes relevant if the family has to reject (i.e. when $1 - l = 1$). However, in order to keep the model on families' decision-making within the dialogue as parsimonious as possible, I suggest that a family's subjective evaluation of the likelihood that it can persuade the headmaster or the recall meeting is captured by its evaluation of the likelihood that the staff meeting will accept an LGT-request (l). "Integrating" these future expectancies into the parameter that represents family's evaluation of the likelihood that the staff meeting agrees, seems even more reasonable since the factors families consider to assess the likelihood that the staff meeting will accept their request (i.e. their cultural capital, involvement in school, student's marks)

correspond to those that tell them their chances to persuade the headmaster and the recall meeting. However, as pointed out above, I assume that marks play a minor role when parents assess the likelihood that the headmaster or the recall meeting accepts their request while parents' cultural capital strongly influences the evaluation of this expectancy.

Moreover, in the same ways, the *costs of rejection* may affect families' school track request. That means, when a family makes a school track request, it not only considers its chances to persuade the headmaster and the recall meeting but also takes into account whether it is able to bear the "psychological" costs of rejection. Yet, I do not assume that these costs are of major importance. Rather, it is a family's belief in its capacity to have its will – at least in the recall meeting – that already affects a family's making of its request.

In conclusion, families' requests are affected by their anticipation of the staff meeting's proposition *and* the decisions of the headmaster and the recall meeting. The common factors that families use to anticipate the school staffs' decisions are their skills, knowledge and experience in dealing with school staff, visible indicators of their commitment to their children's education (i.e. their involvement in school) and student's school performance (i.e. marks and repeated school years). Hence, if "backward-induction" is taken into account, the parameter *l* can more broadly be defined as *likelihood that the school staff (i.e. the staff meeting or the headmaster or the recall meeting) will accept an LGT-request*.⁶²

5.1.4 THE GENERATION OF SOCIAL CLASS DIFFERENTIALS

Esser (1999b) proposes similar mechanisms (i.e. bridging hypotheses, see Subchapter 3.2) as Erikson and Jonsson (1996) and Breen and Goldthorpe (1997): social class differentials in student's average performance, social class differences in families' economic resources to account for the costs of education, and social class differences in families' need to have their child attend the general track to preserve the family's social status. The first mechanism causes social class differences in families' subjective evaluation of the likelihood of success (*p*); the second mechanism explains social class differences in the assessment of resources to account for *C*; the third mechanism corresponds to the *relative risk aversion*-mechanism or the *educational motivation* ($c*SD$).

Breen and Yaish (2006) explain the relative risk aversion-mechanism as follows: "[...], because young people from different class origins have different threshold levels of education

⁶² The argument that future expectancies affect actual decisions corresponds to the "backward-induction"-argument of Breen and Goldthorpe (1997; see Subchapter 3.2.3).

that they seek to reach as a minimum, they will differ in the marginal utility they attach to higher educational levels, giving rise to different propensities to choose alternative educational and non-educational options” (Breen and Yaish 2006: 253). To explain educational motivation or the weighted costs of status decline, one must differentiate between the costs and the likelihood of status decline. Since children from the lowest social classes cannot move downward socially (because they are already at the bottom), they cannot face any costs of status decline ($-SD$). However, the higher the social class a child comes from, the higher are the costs of status decline that the family can experience. Furthermore, there are social class differences in c the likelihood that the costs of status decline emerge if the child does not attend the general track, too: The higher the social class, the more important it is that the child attends the general track in order to preserve the family’s social status and hence to avoid the costs of status decline.

According to Esser (1999b) and Breen and Goldthorpe (1997), social classes are not supposed to vary with regard to their evaluation of the general benefits (B) they attach to attending the general track (see e.g. Becker 2000 for empirical support of this assumption). However, Erikson and Jonsson (1996: 22) assume that social classes vary with regard to the “consumption value” they attach to certain educational tracks (see also Gambetta 1987 or Holm and Jaeger 2008). In line with Esser, I do not assume that there are considerable social class differences in families’ subjective evaluation of general joy of learning and attending the general track.

The institutionalized dialogue between family and school claims another mechanism to contribute to the generation of social class effects on families’ decisions: social class differentials in parents’ *cultural capital* and involvement in school. I derive this mechanism from the suggestion by Lareau and Weininger (2003).⁶³ This mechanism operates through the expectation l (i.e. the likelihood that the school accepts the LGT-request) and the costs of rejection. Since parents from higher social classes are more likely to have the skills and abilities, educational knowledge, trust in the educational system, experience in dealing with school staff, etc. (see the literature presented in Subchapter 3.1.3), they are more likely to be involved and meet the schools’ standards (i.e. parents’ interest in their child’s education, capacities to support the child). Moreover, since they assume that the staff meeting, the headmaster and the recall meeting will take into account their involvement and cultural

⁶³ See also, e.g., Pfeffer (2008) or Erikson and Jonsson (1996) on the role of knowledge of the educational system.

capital (e.g. their knowledge of the educational system), they are more likely to believe that the school will accept their LGT-request ($l = 1$). Furthermore, since parents from higher social classes feel more confident in the school context, have the (linguistic) abilities to successfully deal with school staff, have experience in communicating with staff, have more knowledge of the educational system, etc., they feel less stressed by the talk with the headmaster or their attendance at the recall meeting. That is to say, higher-class families have no costs of rejection while lower-class families may have.

5.1.5 HYPOTHESES

The refined decision-making model yields a set of general and some more specific hypotheses on the generation of social class differentials in families' school track requests (H1 to H4c) and their decisions to reject (H5, H5a, H6). The first general hypothesis is:

H1: The higher the social class position of a family, the higher the likelihood that it requests the general upper secondary school track (LGT) instead of the vocational school track.⁶⁴

The second hypothesis addresses the mediating effect of the *core* of the decision-making model, i.e. the *independent* decision-making model, which corresponds to the formalized model by Esser (1999b):

H2: The positive effect of social class on requesting LGT is strongly (but not fully) mediated by a family's subjectively expected

- i. Costs of sending the child to the general track (C),*
- ii. Likelihood that the child will successfully complete the general track (p) and*
- iii. Their educational motivation regarding the general track (c * SD).*

The following hypotheses take into account the effects of a family's subjectively expected likelihood that the staff meeting will accept the family's LGT-request and thereby of a family's subjectively expected chances that the headmaster and possibly the recall meeting will accept the LGT-request:

H3: Apart from the parameters in the core model, a family's subjectively expected likelihood that the staff meeting will propose the general track (l) – represented by student's visible performance, parents' cultural capital and involvement in school –

⁶⁴ Even though the formalized model differentiates between the two mutually exclusives alternatives "LGT" and "not LGT", I formulate the hypothesis in view of the empirical analyses that follow. These will separately investigate families' decision between the general and the vocational track and between grade retention and the vocational track.

also mediates the social class effects on families' requesting LGT instead of the vocational track.⁶⁵

Further, the multiplicative relationship between l and the core model yields the hypothesis that the effect of the SEU-value that a family would calculate if it were the only one to decide (see the *independent* decision-making model) depends on the likelihood that the staff will accept an LGT-request. In testable terms this means:

H4: As a student's marks increase (indicating to the family that the staff meeting is increasingly likely to accept LGT), the effects of the likelihood of success and of the general costs increase,

and

H4a: As a student's marks decrease (indicating to the family that the staff meeting is not very likely to accept LGT) the effect of the educational motivation increases.

The multiplicative terms also yield a hypothesis on a three-way interaction of the likelihood that the staff meeting agrees, the chances of success and the weighted costs of status decline:

H4b: Given students have relatively good marks but their parents think they have low chances to succeed in the general track, the negative effect of the weighted costs of status decline (or, the positive effect of the educational motivation) is greater than if the parents estimate the chances of success to be high.

Moreover, since families take into account their cultural resources and involvement especially when it is unclear whether the staff will accept their request, I also hypothesize:

H4c: Parental involvement and cultural capital have a greater effect when a student's marks are in the middle- and lower-range and have no or very little effects when a student's marks are very high (or near zero).

With regard to a family's decision to reject the staff meeting's proposition, hypothesize:

H5: Given the staff meeting did not accept the LGT-request, families from higher social classes are more likely to reject than families from lower classes.

Addressing the mechanism that generates this social class effect, I posit:

H5a: This social class effect is mediated by educational motivation, parental cultural capital and parental involvement.

⁶⁵ To directly refer to the formalized model on families' school track request (Subchapter 5.1.2) and specify most concrete hypotheses, I refer to the parameter l as likelihood that the staff meetings accepts an LGT-request. Still, taking into account possible "backward-induction", I also refer to the more general likelihood that the school staff will finally accept the family's LGT-request.

Regarding families' decision to reject the decision by the headmaster, I make the similar assumptions. However, I suppose that social class differences are smaller than on families' first rejections because the lower-class families who reject a first time are more similar to higher-class families in terms of educational aspirations and cultural capital. I hypothesize:

H6: Given the headmaster did not accept the LGT-request, families from higher social classes are slightly more likely to reject the headmaster's decision than families from lower classes.

5.2 School's decision-making

5.2.1 STAFF MEETING'S SCHOOL TRACK PROPOSITION

Although the staff meeting consists of several individuals that may have different motives, I suggest that it basically acts as a unity. Clearly, the “dominant” members are the teachers, class teachers and the headmaster (Masson 1994; Masson 1997). If the teachers disagree, they usually find a compromise. Formally, the orientation advisors have an important role but in practice the headmasters try to restrict their power because they do not act in the same interests (Masson 1994). With regard to parents' and students' representatives, formally they can object and ask questions but actually they behave rather “passively” (Masson 1994).

I assume that the staff meeting acts rationally. The staff meeting subjectively evaluates costs and benefits of choosing LGT for a student and the probabilities that these costs and benefits will emerge. Choosing LGT can have positive or negative consequences for the staff meeting (mainly for the teachers): The benefits G consist of a good reputation vis-à-vis colleagues and the headmaster and professional self-esteem for having taken an appropriate decision; the costs (D) consist of a bad reputation, lowered professional self-esteem and disapproval by the headmaster.

A bad reputation and disapproval by the headmaster can be caused because the school staff, and in particular the headmaster, try to accomplish low numbers of rejections because the educational authorities of the government request schools to do so (e.g. Masson 1994; Masson 1997; see also Subchapter 2.3.1). Furthermore, a rejection is only valid if the parents attend the obligatory talk with the headmaster. Hence, a rejection implies that the parents bother the headmaster and possibly initiate other meetings with the teachers to persuade them. Regardless of the rejection, the school staff generally “suffers” from having sent a child to a school track he or she will not be able to succeed in. Finally, if the information is spread that a school makes inappropriate school track propositions, this could severely harm a school's image.

The emergence of the benefits and costs depends on probabilities or *expectations*. The staff meeting evaluates the likelihood that the student will succeed in the general track (a) and the probability that the family will reject its proposition (r). To assess a , the school staff considers visible performance indicators such as a student's marks and previous grade

repetition. Moreover, the staff may factor in ascriptive student traits such as social background, different abilities and habits, effort and motivation (see Chapter 4). Finally, I assume that the staff factors in traits of the parents such as their competency and willingness to support their child's education and their involvement in school. As argued in the qualitative studies presented in Subchapter 3.1.3, teachers "interpret[ed] parental involvement as a reflection of the value parents placed on their child's educational success" (Lareau, 1987: 81).⁶⁶

In order to evaluate r – i.e. the likelihood that the family rejects – the staff meeting factors in a family's school track request, parents' involvement in school and their cultural capital in terms of self-assurance and familiarity with the educational system. The staff meeting considers a family's request because certainly only a family who is proposed a school track that not corresponds to its request is likely to reject. Parental involvement generally shows the teachers that parents are willing to and experienced in communicating with teachers. Moreover, the effect of PA-membership could be due to the fact that the parent representatives in the staff meeting very often are members of a PA and teachers perceive them as cooperative (Masson 1994).

The SEU-function for the staff's decision to choose LGT is:

$$SEU_S(LGT) = r(-D) + (1-r)[aG + (1-a)(-D)] \quad (3)$$

Equation 3 explicates that if the parents do not reject the staff meeting's proposition ($r = 0$), the emergence of the costs (D) and of the benefits (G) depends only on the likelihood that the student succeeds in the general track (a). If the student will succeed, the staff and the school will receive the benefit G ; if the student will fail, the school has to bear the costs D (bad reputation, lowered professional self-esteem, etc.).⁶⁷ If the family rejects the staff meeting's proposition ($r = 1$), the school has to bear the costs D , too. Then, the costs are somewhat different because they imply families' talk with the headmaster, possible meetings with the staff and an increase of the rate of rejections (which has to be reported to authorities). For purposes of simplicity, I define the costs as one general concept.

⁶⁶ The staff may also consider the family's request to assess a : If a family does not request the general track, they may not be willing to support their child or they may have not requested the general track because they know that they are not able to do so. However, I suppose that this is an indicator of minor importance regarding a but of very high importance regarding r .

⁶⁷ Indeed, the benefit G does also depend on the probability that the student will *actually* successfully complete the general track. However, for the sake of simplicity, I assume that the staff meeting is very good in predicting a student's chances of succeeding in the general track and, thus, if the teachers think a equals 1, the student is very likely to truly succeed. Actually, teachers report to be better than the parents in evaluating students' future chances of success (Masson 1994).

The likelihood that a family actually rejects the general track can be supposed to be very low, even if it initially has demanded the vocational track or grade retention. Therefore, I assume that r is practically always 0 and thus the staff meeting concentrates only on the assessment of a when evaluating the subjective expected utility (SEU) of choosing the general track. This actually yields the following SEU for choosing LGT:

$$SEU_S(LGT) = aG + (1 - a)(-D) \quad (3a)$$

By contrast, when assessing the SEU of opting *against* LGT, the staff is very concerned with evaluating the likelihood of rejection (r). While families would rather not reject a “higher” proposition by the staff meeting, they are likely to reject a proposition that is “lower”.⁶⁸ The SEU of *not* choosing LGT is:

$$SEU_S(notLGT) = r(-D) + (1 - r)[(1 - a)G + a(-D)] \quad (4)$$

Equation 4 outlines that if the staff meeting decides to opt against the general track, it will experience the costs D in case the family rejects ($r=1$). If the family does not reject ($r=0$), the staff meeting will receive the benefits G in case the student succeeds in the lower track (or improves during grade repetition); in case the student does not succeed or appears to be too good for the vocational track (or grade retention), the school suffers from the costs D .⁶⁹

The staff meeting chooses LGT over “not LGT” if:

$$SEU_S(LGT) > SEU_S(notLGT) \quad (5)$$

or, in more detail:

$$aG + (1 - a)(-D) > r(-D) + (1 - r)[(1 - a)G + a(-D)] \quad (5a)$$

Including combinations of a - and r -values in Equation 5a reveals that a student’s chances of success (a) only fully determine the staff meeting’s decision if the likelihood that the family rejects (r) is very small (see Table A1 in the appendix). By contrast, as the risk that a family rejects increases, a student’s chances of success become less relevant. Hence,

⁶⁸ For this reason, I suppose that the staff meeting reflects on r and a in the following order: Firstly, the teachers assess a in order to check whether – if there was no rejection right for the family – they would send the student to the general track or not. As outlined before, one can assume that the lower the student’s marks and other performance indicators, the more likely the staff would be to opt for a lower track or grade repetition. If the staff thinks that it would rather propose a lower track or grade repetition to a student (if there was no rejection option), it, secondly, considers whether the family might reject this proposition (r). The theoretical model presented in Barg (2012) follows this line of thoughts considering the “order” of the evaluation of a and r .

⁶⁹ Since a represents the likelihood that the students succeeds in the general track, $1-a$ is the “reverse” likelihood which corresponds to the likelihood that the student succeeds in the vocational track (or improves during grade repetition). In fact, the student could also fail in the vocational track (or during repetition), but I define $1-a$ that way for purposes of simplicity and since the staff meeting actually can choose “only” between LGT and notLGT.

students whose parents are likely to reject will be proposed the general track at a lower performance-level than students whose parents are not likely to reject.

5.2.2 HEADMASTER'S DECISION AND THE DECISION OF THE RECALL MEETING

I propose that the model of staff meeting's decision-making can explain headmasters' decision-making, too. However, the functions of the different parameters differ in some respects because the circumstances are somewhat different and headmasters tend to have other interests than the teachers (Van Zanten 2002). For instance, headmasters try to accomplish low numbers of rejection rates (since these have to be reported to the regional authorities and are published), while teachers are more concerned with "student issues" such as teaching, evaluating students and placing them in tracks that correspond to their capacities.

To assess a – the student's chances of success – the headmaster considers not only the student's marks and other performance indicators, but the content of the mandatory talk with the parents as well. The better the parents could persuade the headmaster that they are able to support the educational career of their child, the higher the headmaster estimates the student's chances of success. The headmaster might also consider parental involvement and the parent's social class position to assess a student's probability of success. In order to evaluate r , the likelihood that a family rejects his decision and thus initiates the recall meeting, the headmaster considers the content of the talk with the parents, too. If the parents were not convinced by the headmaster's arguments and may have directly said that they will reject again, the headmaster will be less likely to opt against LGT. Moreover, to assess r , he considers their involvement in school and cultural capital in terms of self-assurance in the school context, knowledge of the educational system, and so on. Since the headmasters wants to keep rejection rates low, I further assume that the likelihood of rejection weighs more than the student's chances of succeeding in the general track.

The final possible step of the dialogue is the recall meeting. Its decision-making considerably differs from the decision-making of staff meetings and headmasters. Since the recall meeting's decision is binding and the family cannot reject it, the members do not have to consider a probability such as r . Second, as the recall meeting is attended by *external* teachers who have a lot to say in the decision-making procedure, costs and benefits concerning a school's image, disapproval by the school's headmaster and teachers of the school have no impact. However, the external school staff may subjectively evaluate possible costs such as lowered professional self-esteem for having taken an inappropriate decision or the unpleasant feeling of not having accomplished the requirements of the educational

authorities. Therefore, a recall-meeting's decision-making is mainly driven by its evaluation of a student's chances of success. To evaluate these, I maintain, the recall meeting not only considers student's performance but parents' cultural capital and other indicators of their capacities to support the student. Finally, parental involvement in terms of PA-membership may play a role since representatives of PAs attend the recall meeting.

5.2.3 THE GENERATION OF SOCIAL CLASS DIFFERENTIALS

I argue that social class differentials in the staff meeting's decision-making emerge through three mechanisms. The first mechanism is social class differences in families' school track requests. According to the rational action approach to social inequality in educational attainment (see Subchapter 3.2) and in line with the model developed in the first part of the present chapter, families from higher social classes are supposed to be more likely to request the general track. This mechanism affects r , i.e. school staff's subjectively evaluated probability that the family will reject their decision: The higher a family's social background, the higher the probability that the family requests LGT and hence the higher the likelihood that the family will reject the staff meeting's proposition (if this is not LGT). The second mechanism refers to the primary effects. Teachers consider a student's school performance to evaluate the student's chances to succeed in the general track (a). Since social class is strongly associated with school performance, teacher evaluations of students' chances to succeed in the general track strongly depend on students' social origin.

The third mechanism operates through social class differentials in parents' cultural capital and involvement in school. Like in the model on families' decision-making, the basis of this mechanism is Lareau and Weininger's (2003) suggestion of using the concept of cultural capital in family-school interactions: Since families from higher social classes are better equipped with linguistic abilities, self-assurance, knowledge of the educational system, etc., than parents from lower classes, they are more capable to meet the standards of the school and therefore teachers "reward" them with preferable treatment. In fact, I argue that teachers and the headmaster perceive such parents as better able to support their children (see the literature presented in Subchapter 3.1.3). Hence, parents' cultural capital and involvement affects the staff meeting's evaluation of students' chances of success (a) and thereby generates a *middle-class bias* in their evaluation. At the same time, the staff meeting considers parents' cultural capital and involvement to assess the likelihood of rejection (r), too. Parents who are involved, act self-confident in the school context, show their knowledge and experience of the educational system or their abilities to deal with school staff appear to be

more willing to reject the staff meeting's and the headmaster's decision. Therefore, school staff tends to assess higher-class parents as more likely to reject than lower-class parents.

5.2.4 HYPOTHESES

I advance a number of general and more specific hypotheses that deal with staff meetings' propositions (H7-H9). I keep short assumptions on the decisions of the headmaster and the recall meeting (H11).

The first hypothesis on staff meetings' decision-making addresses the general impact of student social class:

H7: The higher the social class position of a family, the more likely is the staff meeting to propose the general track (LGT) instead of the vocational track.

The second hypothesis takes into account the parameters the staff meeting subjectively evaluates. It posits that the positive effect of student's social background on the probability that the staff meeting proposes LGT operates through the staff meeting's subjectively expected benefit of student success (G), costs of an "inappropriate" decision and parent rejection (D), likelihood that the child will successfully complete the general track (a) and likelihood that the family rejects the staff meeting's proposition (r). Since a staff meeting mainly takes into account student's performance and the family's school track request to assess student's chances of success and the likelihood of rejection, I hypothesize:

H8: The positive effect of student's social background on the likelihood that the staff meeting proposes the general track is mediated by student's school performance and the school track request of the family.

Since the staff meeting also takes into account parents' cultural capital (i.e. knowledge of the educational system, linguistic abilities, etc.) and their involvement in school to assess the likelihood that the family rejects (r) and a student's chances of success (a), I further posit:

H9: The positive effect of student's social background on the likelihood that the staff meeting proposes the general track is also mediated by parents' cultural capital and involvement in school.

The theory yields an interaction of indicators of the likelihood of rejection (r) and the chances of success (a): When a student's performance is relatively high, the staff meeting does not have to worry about rejections because it will anyway propose the general track. However, the poorer the performance of a student, the more the meeting tends to *not* propose the general track and thus the more it is concerned with the likelihood that the family rejects. Therefore, I hypothesize:

H10: Positive effects of indicators of the likelihood that a family rejects (family's school track request, parental involvement and cultural capital, family's social class) are greater when the student's performance is in the lower- or middle-ranges; when the student is performing very well, the effects are low or even zero.

As the staff meeting is worried about keeping rejection rates low, it takes even more account of the requests of families who are likely to reject than of families who are not likely to reject. Since parents' cultural capital and their involvement indicate to the staff meeting whether they are likely to reject, I assume:

H10a: The staff meeting takes more account of a family's request when the parents appear to be well equipped with cultural capital or are involved in school.

Finally, with regard to headmasters' and recall meetings' decisions, I assume that social class differences are relatively small because families are more similar in terms of cultural capital and other relevant factors. I posit:

H11: Student social class has a small effect on a headmaster's and recall meeting's decision.

5.3 Grade retention decisions

Within the French institutionalized dialogue, families, staff meetings, headmasters and the recall meeting can also opt for grade retention (see Subchapter 2.3.1). It is argued that the retention option is used as a *compromise* (e.g. Duru-Bellat 2002; Duru-Bellat, Jarousse and Mingat 1993; Roux and Davailon 2001): If a student has rather low marks indicating that the general track *might* not be the appropriate educational path for him, families and school staff may prefer to let him repeat the school year in order to give him the chance to catch up. Moreover, previous research found that families of higher social origin are more likely to opt for grade retention instead of a lower track (e.g. Kloosterman and de Graaf 2010). This finding indicates that families who have more to lose from not sending their child to the general track and who can bear possible costs of grade repetition make use of the grade retention option. Likewise, families' from higher social classes are more likely to receive a grade retention proposition than working-class families (Roux and Davailon 2001).

In the following sections, I apply the theoretical arguments developed in Subchapter 5.1 and 5.2 to families' and school staffs' decisions between grade retention and the vocational track. The goal of this application is to explain why families from higher social class are more likely to request grade retention instead of the lower vocational track and why school staff – notably, the staff meeting – is more likely to propose grade retention (instead of a lower track)

to higher-class families. From this application of the theoretical model developed above, I derive hypotheses that will be tested in the empirical analysis of this dissertation.

5.3.1 FAMILY'S GRADE RETENTION REQUEST

The model refined in Subchapter 5.1.2 can be applied to families' choice between grade retention and the vocational track. However, the family additionally takes into account costs of grade retention and the likelihood that the student improves during grade repetition. Moreover, a family differently evaluates the likelihood that the staff meeting agrees with the grade retention request. The *costs of retention* consist of direct and indirect economic costs (e.g. forgone earnings because of a later labor market entry; see Jacob and Tieben 2009: 751) and of social, psychological and educational costs, too. Students who repeat a grade lose their peers and have to find new friends. Moreover, they lose self-esteem and motivation because grade retention indicates academic failure (Cosnefroy and Rocher 2004; Holmes and Matthews 1994).⁷⁰ Yet, the social and psychological costs were found mostly for students who involuntarily repeat. Hence, they may be less important when students and their parents voluntarily choose retention. By contrast, economic and educational costs emerge in any case. Educational costs are a lowered educational achievement in the long run (Holmes and Matthews 1994; Jimerson 1999; Jimerson, Anderson and Whipple 2002; Roderick 1994).

In the very short run, however, grade retention can have positive effects on a student's performance (e.g. Hong and Raudenbush 2005). Usually, during the repeated grade students get better marks than in the year before because they are taught the same learning content. Therefore, I assume that families demand grade repetition in order to give their children the chance to improve during the repeated grade. More specifically, the family hopes that the student's performance increases enough so that he is admitted to the general track. This *likelihood that the student improves* enough during grade repetition so as to be admitted to the general track determines whether the family ultimately will have to face the costs of status decline or whether the student will get access to the general track and possibly will finally maintain the family's social status. If the student does not improve during the repeated grade, he will not be admitted to the general track and thus the costs of status decline will emerge. If the student improves, he will be admitted to the general track and the costs of status decline

⁷⁰ Caille and O'Prey (2005) however provide contradicting evidence: they show that among students attaining the end of secondary school those who repeated grades during primary or secondary education have only marginally less self-confidence than students who did not report.

then depend on student's chances to successfully complete the general track (i.e. the parameter p in Equation 2).

I propose that the most important indicator of a student's chances to improve during grade repetition is *previous grade repetition*: If a student who already repeated grades is still poorly performing when he attains the transition to upper secondary school, the family sees that the previously repeated grades obviously have not led to an improvement of the student's achievement. From this perception, they deduce that another repeated grade would probably not further increase the student's performance. Moreover, this indicates that the student is not very likely to successfully complete the general track.

As outlined above, since the school has the final say, families have to consider the likelihood that the staff meeting will accept their request. According to the literature, they demand grade retention when the risk is high that the staff meeting not accepts an LGT-request. Therefore, I assume that families demand grade retention when students' marks are relatively low or in the middle-range. Moreover, if a student has marks in the middle-range, the family is not sure about his or her chances of succeeding in the general track and hence an additional year can help the family to better evaluate the student's chances of success. With regard to the specific likelihood that the staff meeting accepts a grade retention-request, I argue that previous grade repetition is the major indicator again: If a student has repeated grades before the family thinks that the school will strongly advise against another repetition because the student is already older than the other students and because previous grade repetition did obviously not help the student to improve.

Three main mechanisms generate social class differentials in families' decision to request grade retention instead of the vocational track: First, as higher social classes hold more monetary resources, they are more capable of bearing the direct and indirect economic costs of grade retention. Second, since families from higher social classes need their children to attend the general track to preserve their social status, they have more to lose from letting their child attend the vocational track (instead of using grade repetition as a second chance). In other words, since the educational motivation or the costs of status decline of families from higher classes are stronger, they are more willing to let their child repeat a grade so as to get access to the general track one year later. Third, social class differences in previous grade repetition cause social class differences in families' assessment of their children's chances to improve during grade repetition. Since children from lower classes are more likely to have repeated grades previously (i.e. the primary effects), they and their parents are more likely to

think that they will not improve during another repeated grade. This mechanism also affects families' evaluation of the chances that the staff meeting accepts a grade retention request: If a student has repeated grades before, the staff meeting is very likely to not accept another repetition.

This reasoning yields the following hypotheses:

H12: Families from higher social classes are more likely to request grade retention (instead of the vocational track) than families from lower social classes.

H13: The effect of social class on families' choice of grade retention over the lower track is mediated by families' subjective assessment of their resources to account for the economic costs of retention, their educational motivation and students' previous grade repetition.

Since families demand grade retention when the risk is high that the staff meeting does not accept an LGT-request, I posit:

H13a: When a student's mark is low, the likelihood that a family chooses grade retention instead of the vocational track is the highest.

5.3.2 STAFF MEETING'S GRADE RETENTION PROPOSITION

To address staff meetings' decision between grade retention and the vocational track, I apply the model developed in Subchapter 5.2. The staff meeting makes its grade retention proposition in the same way as its LGT-proposition except that the parameters are defined somewhat differently: The staff meeting takes into account specific costs and benefits of grade retention and the probability that the student improves during the repetition. The *costs of grade retention* consist of the "burden" of having to teach the low-performing student again and of disapproval by colleagues, the headmaster and other parents. Teachers and headmasters want to avoid high rates of grade repetitions because these indicate that a school system is poorly performing (Ryan and Watson 2006). Moreover, high numbers of retained students increase economic costs for the school and for higher administrative institutions because they lead to higher class sizes and more need for teachers and learning material (Bali, Anagnostopoulos and Roberts 2005; Schnurr, Kundert and Nickerson 2009). Finally, similar to the rejection rates, the French government requires the schools to keep retention rates low (Masson 1997).

According to interviews with school psychologists who are involved in the decision-making process, the *benefit of grade retention* is that it "gives immature students the chance to grow up" (Schnurr, Kundert and Nickerson 2009: 414). In other words, teachers retain students so that they can improve their performance during the repeated year. In view of the

transition to upper secondary school, I suggest that teachers also propose retention when they are not sure about a student's chances of succeeding in the general track. After another school year the teachers will know better which school track is appropriate.

To evaluate students' chances to improve, the staff meeting considers – like the families – previous grade repetition. If the student has repeated grades previously and still is not performing very well, repetition of another school year will probably not help her improve. Moreover, the staff meeting takes into account parental involvement and cultural capital to assess whether a student's parents are capable of supporting the student to improve during grade repetition. These factors also influence the staff meeting's evaluation of the likelihood that the family rejects their proposition. Another important indicator of the likelihood of rejection is, again, family's request: If a family has requested grade retention, it will not reject; if it has requested the general track, it is very likely to reject an LPA-proposition but less likely to reject a retention-proposition because this implies that the child has the chance to get access to the general track one year later.

Four mechanisms generate effects of students' social class on the likelihood that the staff meeting proposes grade retention instead of the vocational track: First, since students from higher social classes are more likely to request the general track and grade retention, they appear more likely to reject if the staff meeting proposes the vocational track. Second, as students from higher social classes have, on average, better marks and, most importantly, are less likely to have repeated grades before, they appear to be more likely to improve during grade retention. Third, due to social class differences in the “cultural capital that meets the standards of the school” and in parents' involvement, the staff meeting thinks that families from higher social classes will better support their children during the repeated school year. Also, these social class differences may cause the staff meeting to think that parents from higher social classes are more likely to reject.

In view of this theoretical reasoning, I hypothesize:

H14: The staff meeting is more likely to propose grade retention instead of the vocational track to families from higher social classes than to families from lower classes.

H15: The positive effect of student social class on the probability that the staff meeting proposes grade retention instead of the vocational track is mediated by previous grade repetition, families' school track request, parental involvement and cultural capital.

6 Previous Research

This chapter presents selected empirical studies on families' and teachers' making of school track decisions. The findings of these studies address theoretical assumptions similar to the hypotheses that will be tested in the empirical part of this dissertation. To gain insights in the detailed decision-making processes of families, I give an overview over the theoretical arguments, empirical applications and results of most direct well-known empirical tests of the RAT-models on educational choices. In order to outline the state of knowledge of teachers' decision-making, I present qualitative and quantitative studies that indicate why teachers take into account students' social origin and factors that are related to students' social origin. Finally, I describe procedures and results of selected studies that analyze grade retention decisions.

6.1 *Family's decision-making*

For the last ten years a set of attempts has been made to empirically test the RAT-models on educational decision-making. These previous analyses vary with regard to the specific hypotheses they derive and the findings they provide. In particular, they are not equally capable of testing the most detailed hypotheses or the full explanatory power of the model. This is because most available secondary data does not enable researchers to directly operationalize all of the decision-making parameters that are required by the theoretical model. As the empirical analysis presented in this thesis attempts to be a most appropriate test of the theoretical model developed in Subchapter 5.1, it is important to outline how previous research has addressed this task. Therefore, the following sections not only provide summaries of the theoretical assumptions and findings of these previous analyses, they also focus on the operationalization of the decision-making parameters.

6.1.1 TESTED THEORETICAL IMPLICATIONS

In the last decade, numerous studies provided empirical tests of the Breen and Goldthorpe-model (B&G-model). These studies are mainly concerned with testing assumptions that follow from the *relative risk aversion-mechanism* or from the theoretical foundation of this mechanism, i.e. the "positional theory" by Keller and Zavalloni (1964). As a most general assumption following from this mechanism some authors suggest: students want to attain an educational level that is at least the same as the educational level of their parents' (Holm and Jaeger 2008; Need and De Jong 2002). Further, the basic testable

hypothesis that is typically derived posits: given the same subjectively evaluated likelihood of success and costs of education, families from higher social classes are more likely to choose higher educational tracks or continuation in education than families from lower classes (Breen and Yaish 2006; Davies, Heinesen and Holm 2002; Holm and Jaeger 2008; Need and De Jong 2002). An empirical test of this hypothesis implies that a social class effect on educational choices remains after controlling for a family's economic resources and the student's school performance. By contrast, according to *human capital theory* for instance, no such effect of social background remains (Davies, Heinesen and Holm 2002).

More specific hypotheses derived from the relative risk aversion-mechanism deal with the *shape* of the relationship between social origin and the utility assigned to different attainable educational levels. Davies, Heinesen and Holm (2002), for instance, confront the B&G-model with *human capital theory*: On the one hand, they argue, the B&G-model posits that the function of the benefits of educational choices and parent's education has a "kink", or discontinuity, when the child reaches the parents' educational level. Before reaching this point, the slope increases sharply; beyond it, the function remains constant. On the other hand, human capital theory suggests that there should be no such kinks. Accordingly, Holm and Jaeger (2008) argue that the points or thresholds (in an educational career) at which the costs of attaining a certain educational level outweigh the benefit vary by individual's social background. They maintain that individuals gain a utility "bonus" when they reach the same class as their parents and, since the marginal costs of going even further in the educational system may increase faster than the utility of that additional education, individuals from some classes do not wish to attain a class that is *higher* than that of their parents. Therefore, the desire to avoid downward social mobility has a much stronger impact than the wish to move socially upward. Also Breen and Yaish (2006) give considerable attention to the shape of the function of the utility of educational choices and social origin as they provide detailed hypotheses on the associations between each EGP-class of origin and specific levels in the educational system.

Another hypothesis derived from the relative risk aversion-mechanism is that students and parents from all social classes fear social decline to the *same* extent (Gabay-Egozi, Shavit and Yaish 2010; Stocké 2007; Van de Werfhorst and Hostede 2007). In testable terms this means that social class should have no effect on a family's desire to have the child maintain the family's social status. Similarly, it is assumed that social classes do not vary with regard to the utility they assign to income, unemployment protection or occupational prestige and their assessment of their own performance *net* of their actual ability (e.g. Gabay-Egozi, Shavit

and Yaish 2010). In other words, there should be no *net* social class effect on parents' and students' subjective evaluation of objective conditions and events. For example, if a student coming from a family belonging to an intermediate social class does not manage to attain an occupation that assigns her to the intermediate social class, the student and her family will be as sad and unhappy as would be a higher class family whose child does not attain a job in the higher class. In the same line, a working-class student and a higher-class student will assign the same level of likelihood of success to a specific mark, for instance.

Moreover, the available secondary data determines the deduction of hypotheses on whether the theoretical models are capable of explaining the full social class differences. For example, Becker and Hecken (2009b) try to operationalize all the components of Esser's model to explain social class differences in tertiary education decisions. They hypothesize an "exhaustive explanation of social origin effects" (Becker and Hecken 2009b: 30; see also Becker 2000). Stocké (2007) who provides a very comprehensive test of the model by Breen and Goldthorpe investigates whether the model is a "*valid and complete* theory for explaining educational choices and class inequality herein" (Stocké 2007: 506, highlighting like in original). As Stocké uses data that enable a direct test of the model, he can test the hypothesis that no mechanisms contrary to those advanced by the B&G-model (e.g. social class differences in norms and values) generate observed social class effects. Gabay-Egozi, Shavit and Yaish (2010) provide another comprehensive empirical analysis of the model and analyze whether the mechanisms underlying the theoretical model can fully explain why students' choices of subjects that are more or less relevant for their future educational career vary by their social background.

Some studies additionally refine the theoretical model and derive hypotheses that go beyond those typically deduced from the B&G-model. For instance, Jaeger's extension (2007) disentangles economic and social returns and yields the assumption that the social returns to educational choices do not only consist of maintaining the social status of one's family but of staying in contact with peers, too. Holm and Jaeger (2008) put forward the role of *instantaneous* as opposed to *future* utility (see Subchapter 3.3.2). From this refinement of the original model follows the hypothesis that social class differences in the immediate pleasure of following a general educational track contribute to the generation of secondary effects.

Few studies test Esser's model (1999b).⁷¹ Becker (2000) tests both the model by Erikson and Jonsson (1996) and Esser's model (1999b). As outlined in Subchapter 3.2.4, he moreover extends the models by factoring in the institutional context. In this extended model, he assumes that teacher recommendations and parents' effort to influence the teachers cause discrepancies between families' educational intentions and their actual choices. In a later study, Becker (2003) applies Esser's model to explain why social class differences in educational attainment have pertained over the last decades in the Federal Republic of Germany, despite of the overall educational expansion. Notably, he hypothesizes that the impact of the educational motivation ($c*SD$) has increased: Since educational expansion has depressed the relative value of educational credentials, the subjectively expected costs of status decline have become more important and this particularly may be the case for families with parents who have profited from educational expansion.

Even though Stocké (2007) tests the B&G-model, his elaborate approach to the relative risk aversion-mechanism could be interpreted as a test of the effect of Esser's concepts of costs and likelihood of status decline. Stocké specifies two components: First, the importance parents attach to their child's maintaining the family's social status and second the instrumental value they assign to different educational attainments with regard to labour-market outcomes. This value is the basis for parents' expectations of the likelihood that each of the educational attainments will preserve the family's social status. Stocké assumes that this value increases with the educational attainment that is considered; for the same educational credential, it increases the lower the social class of the family; and, it is more differentiated between the attainments the higher the social class of the family.

6.1.2 OPERATIONALIZATION AND DEGREE OF DIRECT TESTING

Previous studies considerably vary with regard to their capacities to *directly* test the theoretical models. Generally, there are two strategies for the testing of theoretical models with survey data.⁷² The *direct strategy* requires the measurement of the utilities that the actor assigns to each of the alternatives that she has and the decision that she actually takes (Brüderl 2004: 167-169). To capture these utilities, researchers must measure respondents'

⁷¹ This could be due to the fact that the original work is written in German and no comprehensive outline of the theory is available in English.

⁷² Here, the term "theoretical models" indicates that not only models based on RAT but decision theories in general can – in principle – be tested with these two strategies. However, since models based on RAT are very precise and, hence, generally suit empirical tests, while it is basically more difficult to test most competing decision theories, the presentation of the two strategies will focus on the testing of models based on RAT (Brüderl 2004: 166).

expectations and their perceived costs and benefits (Kroneberg and Kalter 2012). For instance, Stocké (2007) uses a measure of the likelihood of success that is based on a question that asked the parents how likely they think it is that their child will successfully complete different educational degrees. To measure costs and benefits, respondents are typically asked how good or bad, or how important specific consequences would be for them (Kroneberg and Kalter 2012). As it is often impossible to observe the rational decision-making processes directly (Hedström and Swedberg 1996), other ways must be found to evaluate theories empirically.

The *indirect strategy* does not use measures of respondents' expectancies, costs and benefits and requires the introduction of additional assumptions (Brüderl 2004: 169-170). These hypotheses can correspond to the "bridging hypotheses" (Kroneberg and Kalter 2012; see Subchapter 3.2). They assume that in a certain social situation the utility of one alternative is greater than the utility of another alternative and hence actors will choose the first alternative if they are in that certain social situation. The indirect strategy consists of using survey data to test these introduced hypotheses. To do so, survey data has to provide measures of the social situations the actors are in and the decisions they actually take. Consequently, one finds evidence supporting the theoretical model if the data reveals that an actor chooses the decision that is predicted by the introduced assumption. For instance, if a researcher wants to empirically examine the effect of individuals' subjective assessments of their economic resources to bear the costs of a certain educational pathway on choosing that certain pathway, he could use income as a measure of individuals' social situations. He would then introduce the assumption that if an individual has a high income, the individual thinks that she can bear the costs of the educational pathway and consequently she chooses that pathway. If the empirical test reveals that income has a positive effect on choosing the certain educational pathway, the test provides support in favor of the theoretical model.

Actually, a lot of economists (and some social scientists) are not convinced that RAT can be tested with survey data (Brüderl 2004: 164). Then again, it is argued that the utilization of survey data enables sociologists who do quantitative research to go beyond the mere "lumping together" of variables and to do sophisticated empirical analyses of specific theories (Brüderl 2004; Goldthorpe 1996a; Goldthorpe 2001). Survey data is supposed to suit the analysis of RAT very well since RAT does not assume that an actor's decision is determined by his or her characteristics. Instead, it maintains that an actor's choice of an alternative depends on the restrictions of the social situation the actor is in (e.g. social class position or available economic resources). Survey data can easily provide information on such

restrictions but has more problems in validly measuring individuals' characteristics (Brüderl 2004: 165). Therefore, applying survey data to RAT enables quantitative researchers to do more than "variable sociology" and, at the same time, this "alliance" provides RAT with efficient data (Goldthorpe, 1996a, Brüderl, 2004).⁷³

In my view, the study by Stocké (2007) and the study by Gabay-Egozi, Shavit and Yaish (2010) provide very direct tests of the B&G-model. Yet, some contributions make use of variables that come considerably close to some theoretical decision-making components (e.g. Becker 2003; Becker and Hecken 2009b; Van de Werfhorst and Hostede 2007).

It is a difficult endeavor to directly operationalize relative risk aversion or the costs and likelihood of status decline. Consequently, there are a variety of such attempts. To measure the *costs of status decline*, Becker (2000, 2003) used parents' wish that their child reaches the same educational attainment as their own, the discrepancy between the occupation of the head of the household and the occupation anticipated for the child, and the correspondence of parents' "educational affinity" and that of the higher social class. Becker and Hecken (2008, 2009a, 2009b) also employed students' answers to the general question "how good are chances in the labor market for graduates of vocational training without university degree?". To operationalize the *likelihood of status decline* Becker (2003) used student's subjective assessment of the impact of education on status decline and attitudes towards insuperable barriers between social classes. Also, he constructed a variable that indicates whether the parents aspire after a certificate for their child that is *lower* than their own. Becker and Hecken (2009b) used the question "do you think that vocational qualification and further education will provide you with the same occupational opportunities as a university degree?" to operationalize the likelihood of status decline that students associate with not attending university studies.

To analyze the effect of family's *relative risk aversion*, Stocké (2007) simultaneously used two variables: With parents' answers to the question "would you please tell me how strongly it would bother you if your child reached a less prestigious occupation than yourself" (Stocké 2007: 517) he operationalized the importance parents attach to status maintenance. To measure the "status maintenance-value" parents associate with different educational attainments, he used information on whether parents think that different attainments will enable their child to reach an occupation that is at least as prestigious as their own. In my

⁷³ Lately, experiments have increasingly been lead to analyze RAT. However, the disadvantage of these projects is that its results are only hardly generalizable (Brüderl 2004: 165).

view, these two measures would suit the operationalization of the costs and likelihood of status decline, too.

Need and De Jong (2002) examined the relative risk aversion-mechanism by means of student's aspiration after the same educational level as that of their parents. Subsequently, authors employed elaborate item batteries including wordings such as "I find it important to achieve a better job than my parents", "I want to achieve a higher level of education than my parents", "my parents would dislike it if I found a worse job than they have" and "I am afraid to achieve a lower position than my parents later in life" (Van de Werfhorst and Hofstede 2007, Gabay-Egozi, Shavit and Yaish 2010). Some authors further split such items in those that measure relative risk aversion and others that represent the aspiration after upward social mobility (e.g. Gabay-Egozi, Shavit and Yaish 2010).

Some authors moreover operationalize benefits that students and parents attach to certain educational diploma.⁷⁴ The evaluation of these benefits Moreover, Breen and Yaish (2006) operationalize the information that the young men in their analysis sample use to form their beliefs on the utilities of educational attainments by a variable that indicates the association between educational attainment and class position of older men. Becker (2003) employs student's assumption that the upper secondary school certificate (*Abitur*) is needed to realize occupational opportunities and status and Gabay-Egozi, Shavit and Yaish (2010) who analyze social class differences in curricula choice use students' assessments of the likelihoods that success in each of the different subjects will admit to university studies.

Measures of students' and parents' subjective evaluation of the likelihood of success differ mainly on whether subjective or "objective" performance indicators are used. I put the word objective in quotation marks since some indicators such as marks or other teacher evaluations could be affected by *middle-class biases* (see Chapter 4). The most direct operationalization is based upon parents' or students' evaluation of the likelihood that the student completes a certain school track (Becker 2003; Need and De Jong 2002; Stocké 2007). Another quite direct measure is students' expectation that they would get a good or bad mark in a certain educational track (Gabay-Egozi, Shavit and Yaish 2010) or their self-reported ability (Davis, Heinesen and Holm 2002). Some studies partly rely on performance indicators such as marks and teacher evaluations (Becker 2003) while most use (students'

⁷⁴ In fact, class-specific norms, values and knowledge could produce social class differences in the perception of the benefits of educational attainments such as access to university. This is no core benefit-mechanism; the important benefit that creates social class differences in families' decisions is the "maintenance of family's social status".

reports of) scores on standardized tests (Breen and Yaish 2006; Holm and Jaeger 2008; Jaeger 2007; Van de Werfhorst and Hofstede 2007). Authors that have on hand both types of measures find that they strongly correlate (e.g. Gabay-Egozi, Shavit and Yaish 2010; Need and De Jong 2002; Stocké 2007).

The most direct measurements of the subjectively evaluated costs of education are parents' report of how strongly the child's attendance at the different available tracks would be a financial burden for the family (Stocké 2007) or whether the child's transition to further secondary education would cause the family to make savings (Becker 2003). Indirect measurements, which generally consist of evaluations of families' economic situations, can be further divided into direct and indirect measurements of families' economic situations: On the one hand, family income is a quite direct indicator of families' resources to account for the costs of education (Davis Heinesen and Holm 2002; Need and De Jong 2002). On the other hand, more indirect variables are number of siblings, presence of household objects such as computer or dishwasher, type of housing (e.g. rented, private) and number of rooms in that accommodation (Becker 2003; Breen and Yaish 2006; Gabay-Egozi, Shavit and Yaish 2010). There is evidence in favor of the "measurement assumptions" that link such objective circumstances (e.g. number of siblings and household income) with families' subjective evaluation of the costs (Stocké 2007).

Finally, concerning the central explanatory variable student social origin, previous operationalizations vary on whether they use parents' social class (e.g. Breen and Yaish 2006; Stocké 2007) or educational attainment (e.g. Davies, Heinesen and Holm 2002; Gabay-Egozi, Shavit and Yaish 2010; Need and De Jong 2002; Van de Werfhorst and Hofstede 2007) and on whether they observe the higher degree among both parents (e.g. Davies, Heinesen and Holm 2002; Gabay-Egozi, Shavit and Yaish 2010; Need and De Jong 2002; Stocké 2007) or only that of the head of the household (e.g. Becker 2003; Breen and Yaish 2006; Holm and Jaeger 2008). In my view, the most appropriate operationalization is clearly the one that is suggested and realized by the designers of the theoretical model, i.e. EGP-class. Moreover, taking account of *both* parents' social class appears to be the method that is most up to date. Chapter 7, which generally presents the research design, gives a detailed outline of the EGP-schema and the reasons for using information on both parents' class.

6.1.3 FINDINGS

Only the very direct empirical tests can provide evidence in favor or against the assumption that the theoretical models are able to explain the "full amount" of social class

differentials in families' educational choices. The study by Stocké (2007), which analyses social class effects on German students' transitions from lower to upper secondary education, appears to be the most direct test up to now. It reveals that the expected mechanisms cannot fully account for the social class effects: Even when the elaborate measures of subjective costs, subjective likelihood of success and the status maintenance motive are factored in, families from the service class are more likely to choose higher school tracks. Gabay-Egozi, Shavit and Yaish (2010) who provide another quite direct test of the B&G-model analyze students' choices between subjects that strongly determine their subsequent school career. Like Stocké, they find that the theoretical model cannot fully explain social class differentials in these choices. The same is for Becker (2000) who tests Esser's (1999b) model: The variables he uses to operationalize the decision-making parameters produce only a low model fit and do not fully account for the social class effects on families' educational intentions (i.e. their planned educational decisions). By contrast, Becker and Hecken (2009b) find evidence in favor of their hypothesis on an "exhaustive explanation of social origin effects on higher education access".

The finding that most direct tests cannot fully explain the secondary effects is very important: it indicates that more mechanisms than those suggested by the theoretical models generate social class effects on educational decisions. Stocké (2007) suggests that these are social class differences in information search strategies, values attached to education or systematically biased perceptions of returns to educational attainments and the likelihood of reaching these. As they find that no social effect on curricula choice remains when they control for economic resources and school performance, Gabay-Egozi, Shavit and Yaish (2010) conclude that the primary effects are more important than the model assumes. Finally, the interpretation by Becker (2000) corresponds to the assumptions of the theoretical model developed in Chapter 5: The institutional context in which families make their decisions produces additional mechanisms that contribute to the generation of social class effects. In the German system such additional mechanisms could be a family's evaluation of the teacher recommendation, the effort they have put in influencing the teachers and other family resources (Becker 2000: 465).

Even though previous research does not show that the theoretically expected mechanisms explain the full extent of social class effects, it provides evidence in favor of some specific hypotheses derived from the decision-making models. For instance, Davies, Heinesen and Holm (2002) find, as they hypothesized, a "kink" in the function of some of students' educational choices and their parents' education when students attain the

educational level of their parents. Moreover, Becker's (2003) results indicate that Esser's SEU-model can explain a considerable part of the development of social stratification in Germany since the 1950s: As expected, for instance, the effect of educational motivation has considerably increased over time and the effect of costs of education has decreased. With regard to the relative risk aversion-mechanism, Need and De Jong (2002) show that students aspire after the same educational level as that of their parents and Breen and Yaish (2006) interpret *net* effects of certain EGP-class on choices at specific educational levels as evidence supporting the mechanism.

While some of the basic mechanisms are found to have the expected impacts on educational choices, the most important – relative risk aversion – is only partly supported. Gabay-Egozi and colleagues (2010) find that school performance, the benefit-evaluation and relative failure expectations have strong effects on curricula choices, but relative risk aversion has no such effect. Similarly, the analysis of secondary school track choices by Stocké (2007) detects no impact of the importance attached to status maintenance but strong positive effects of subjective likelihood of success and the suitability of the educational degrees for the preservation of family's social status. Using these findings to evaluate the model by Esser, one could cautiously infer that Stocké's results do not support the effect of the costs of status decline but those of the likelihood of status decline. Becker (2000) and Becker and Hecken (2009b) who explicitly test Esser's model find strong effects of the concept of educational motivation. Van de Werfhorst and Hostede (2007) find that their relative risk aversion measure does not reduce the social class effect that remains after controlling for school performance. Moreover, in contrast to their theoretical expectations, they find no significant effect of mobility concerns on school track type. Still, the relative risk aversion-variable has a significant, quite strong, impact on educational choices, when social class, parental background, school type actually enrolled in, school performance and cultural capital are controlled.

The hypothesis that social classes do not vary with regard to their general desire to maintain family's social status cannot be supported either. It is found that parents from lower social classes attach more importance to status maintenance than parents from higher classes (Gabay-Egozi, Shavit and Yaish 2010; Stocké 2007). By contrast, the finding that higher social classes believe that only higher educational attainments will guarantee status maintenance and intermediate and lower attainments will not, represents evidence in favor of the model B&G-model (Stocké 2007). To explain the negative class effect on relative risk aversion, Gabay-Egozi and colleagues argue that students of higher social origin may be less

concerned because they believe that the resources of their parents can back them up, or because they see their social status as given. This interpretation seems in line with arguments of Bourdieu (see Subchapter 3.1.1).

Other important findings relate to social class differences in the subjective perception of objective circumstance and the role of the cost-parameter. Need and De Jong (2002) show that even when marks are controlled students with higher educated parents have higher expectations of success. This result implies that students of higher social origin tend to “overestimate” their performance. By contrast, Stocké (2007) and Gabay-Egozi, Shavit and Yaish (2010) do not detect such a “perception bias”. With regard to the effect of subjectively evaluated costs of education, previous research provides ambiguous evidence. Whether studies find the expected effect depends on the kind of observed educational decision. For instance, there is no effect regarding choice of secondary school track (Need and De Jong 2002; Stocké 2007), but one for the decision on university studies (Becker and Hecken 2009b; Need and De Jong 2002) or dropping out of education after higher secondary school levels (Davies, Heinesen and Holm 2002).

6.2 School’s decision-making

This subchapter presents quantitative and qualitative studies that provide insights in the decision-making of teachers. More specifically, the findings of these studies shed light on the determinants of teachers’ school track decisions. The presented literature deals a lot with school track recommendations of German primary school teachers as this area of research provides very recent and comprehensive findings on teachers’ decision-making. In Germany, the crucial school track choice is made after primary education. The procedure that provides the secondary school track decision varies over federal states. In some federal states, teachers make secondary school track recommendations that are *binding*. There, students can be enrolled in a school type that was not recommended by the primary teachers only if the student passes an entry examination. In most of these states, law does also tell the teachers which marks a student must have to be recommended a certain school type. In the other federal states, the teacher recommendation is *not binding* and students’ parents can enroll their child in the school type they wish to.

6.2.1 COMPARISONS OF SECONDARY EFFECTS ON TEACHER AND FAMILY DECISIONS

According to previous research, by far the most important determinant of teachers’ school track decisions is student’s school performance. In view of the research topics of this

dissertation, the question is whether student's social origin has an effect, too, and – most importantly – whether this effect remains after controlling for school performance. Some studies make use of the variation of the legal frameworks over German federal states to compare the size of these *secondary effects* on teachers' school track choices and parents' school track decisions. One core hypothesis of these studies is that secondary effects on family decisions are larger than on teacher decisions. They basically test this hypothesis by quantifying the relative sizes of the primary and secondary effects on school transitions in federal states where teacher recommendations are *not* binding and federal states where teacher recommendations are binding (e.g. Neugebauer 2010) or take advantage of a reform of the decision procedure in *one* federal state (Dollmann 2011). The studies apply a decomposition-method that was first advanced by Jackson et al. (2007) to generally quantify the primary and secondary effects of social stratification.⁷⁵

Neugebauer (2010) hypothesizes that secondary effects on teacher decisions are smaller than on family decisions because the relative risk aversion-mechanism has an impact only on family decision-making. Still, little secondary effects on teacher decisions will appear since teachers consider class-specific student traits such as motivation, effort and linguistic abilities or parents' capacities and willingness to support the student. Indeed, using data obtained from a national longitudinal survey, Neugebauer finds that in federal states with binding teacher recommendations 54 percent of the social class differentials are due to secondary effects, while in states with no binding recommendations it is 61 percent. However, the *total* social class effect is the same in every state indicating that lower relative secondary effects do not imply lower social class differentials. As an explanation the author proposes that in states where teachers have the final say parents invest more in their children's performance development or put pressure on the teachers resulting in better marks and thereby boost the primary effects.

While the study by Neugebauer (2010) cannot surely rule out that other institutional differences between the federal states have an impact, Dollmann's (2011) analysis can do so as it is based upon a *natural experiment*: In 2006, the government of a federal state changed and modified the regulation of the transition from primary to secondary school. Up to the reform, teachers made *non-binding* secondary school track recommendations. After the reform, teacher recommendations had become *binding*. Dollmann shows that the secondary

⁷⁵ For other studies using this method to decompose primary and secondary effects see for instance Erikson and Rudolphi (2009), Kloosterman et al. (2009), Schindler and Reimer (2010) and Ichou and Vallet (2013).

effects on transitions into the general secondary schools track are more than five times higher when the teacher recommendation is *not* binding as compared to when it is binding.

Regarding the operationalization of student's social origin, both studies have to rely on parents' highest educational attainment and can differentiate only between few categories. While Neugebauer uses marks as an indicator of students' school performance, Dollmann employs scores on a test that is adapted to students' curricula and assesses performance in reading, writing and mathematics. Moreover, Dollmann factors in a measure that is based upon student's score on a "basic-intelligence test".

Gresch, Baumert and Maaz (2009) also make use of the differences between federal states to analyze differences in families' and teachers' school track decisions. In contrast to the former presented studies, they do not factor in student's school performance since their goal is not to disentangle the primary and secondary effects. In accordance with the findings of other studies, their results reveal that social origin effects are stronger in federal states where the teacher recommendation is not binding. Moreover, three-way interactions of the teacher recommendation, the bindingness of the recommendation and student social origin reveal that the institutional framework cannot reduce social class effects on the transition probabilities.

Maaz and Nagy (2009) specify the primary and secondary effects on family decisions and teacher recommendations, too, but they do not take advantage of the institutional variations over federal states. In the theoretical part of their work they modify the common specification of the primary and secondary effects by taking account of the fact that teachers may increase the secondary effects through *middle-class biases* in marks and school track recommendations (see Subchapter 3.3.1 and 4.1). They find "secondary effects on marks" as student social background has a significant positive effect on marks, even when scores on standardized tests are held constant. Similarly, their results show that – controlling for the scores and marks – teachers are significantly more willing to recommend the highest secondary school track to students of higher social origin. This represents evidence in favor of "secondary effects on recommendations". Furthermore, Maaz and Nagy (2009) find that secondary effects on teacher decisions are smaller than on family decisions and that 54 percent of the *secondary* social origin effect on the transition probabilities is driven by secondary effects on marks and recommendations, i.e. secondary effects "produced" by the teachers.

6.2.2 DETERMINANTS OF TEACHER DECISIONS

Qualitative studies provide interesting findings that support the above-developed assumptions on teachers' rational decision-making, i.e. their evaluation of costs, benefits and the likelihood of student success. Masson's (1994) analysis of the institutionalized dialogue between family and school at the end of grade 9 reveals that teachers consider themselves to be very good in assessing students' future chances of success. They state that they are able to take into account long-term consequences while the families are not. Moreover, they categorize parents according to three types: The first type of parent is well informed and has an exact educational plan for his child. In line with theoretical model developed in Chapter 5, these parents are very likely to reject and typically belong to higher social classes (many of them are secondary school teachers). The second type consists of parents who are PA-members or parents' representatives. The interviewed teachers say that these parents are not likely to reject. Rather, they respect and support the teachers' work (many of them are primary school teachers). The third parent-type includes lower-class parents who never come to school to meet the teachers even though their children have the most difficulties. Perier (1994: 71-73) asked French teachers in lower and upper secondary schools whether they believe that only students who have "real chances of success" should be admitted to the various educational tracks. Most teachers strongly agreed but there were differences according to which secondary school type a teacher is working in: Teachers in lower secondary and vocational upper secondary schools seemed more "tolerant" since less of them agreed strongly than teachers in general upper secondary schools. This reveals that teachers who have to decide on the upper secondary school track are more willing to let students attend the general track even though their chances of success are not guaranteed. Correspondingly, lower secondary teachers and vocational secondary teachers more believe that "as many students as possible should be given the chance to attain a long educational track" than general secondary teachers. However, since French students are supposed to be sensitive to the subject of inequality in educational opportunity (see Meuret and Alluin 1998 and Subchapter 3.1.1), such results must be interpreted with caution since social desirability could distort them.

Hollstein (2008) who led 15 narrative guided Interviews with teachers of primary schools in seven districts of Berlin also finds that teachers calculate "likelihoods of success" and make assumptions on the possible consequences of inappropriate recommendations. Such costs of inappropriate decisions could be, Hollstein finds, that a student who received a recommendation for the general secondary school later has to change to a lower secondary

school. By contrast, sending a child to a lower secondary school is no real disadvantage since later – if a student appears to be good enough – he or she can still attend a higher school. Moreover, the interviews reveal that teachers are always concerned with the wealth of a student. For instance, some of the interviewed teachers say that they refrain from recommending a higher school track to children because they want to *protect* the child from failure and letdowns.

Nölle, Hörstermann, Krolak-Schwerdt and Gräsel (2009) led half-standardized guided interviews with 52 primary school teachers in two German federal states to find out which information they use to form their school track decisions. As the two federal states differ with regard to the bindingness of the teacher recommendation, the authors moreover examined whether this institutional regulation influences the decision-making. They derive hypotheses from a model of social judgment and decision-making (Fiske and Neuberg 1990) that assumes that individuals choose one of two strategies to form judgments and decisions: Either, they put a lot of effort in information search and processing, or they use simple heuristics. As previous research has shown that the extent to which individuals have to take charge of their decisions has a positive effect on the likelihood that they choose to put effort in information search and processing, the authors hypothesize that teachers' decision-making will not be the same in both federal states. Their results reveal that teachers' decision-making is affected by the institutional context but do not necessarily support the specific hypotheses derived from the psychological model.

The results of various studies support the theoretical considerations that were addressed in Subchapter 4.2 and 5.2. First, there is evidence for effects of *students' habits, behaviors, effort and characteristics* on teachers' school track recommendations. For instance, Perier (1994: 70-71) shows that teachers in French lower secondary schools believe that the staff meeting's proposition has to take into account students' effort. For Germany, Schneider (2011) finds that teacher evaluations of students' motivation, effort, willingness to learn and school work mastery partly mediate the effect of student social class on teachers' school track recommendations. Hollstein's (2008) qualitative analysis reveals that they consider students' work habits and motivation and available places at secondary schools in the district. Teachers report to take into account the latter factor because they do not want to recommend a "rough" lower secondary school to a student with "delicate" personality. Arnold et al. (2007) show that given the same actual reading ability, students who evaluate themselves as being good in understanding texts and as generally knowing how to achieve good marks are more likely to receive a teacher recommendation for the highest secondary school track. Similarly, given the

same marks or scores on ability tests, parents' reports of their child's motivation and of their fear of exams and teacher assessments of student effort and talent (e.g. intelligence, creativity) considerably affect teacher recommendations (Arnold et al. 2007; Stubbe and Bos 2008; Stahl 2007).

Stahl (2007) also finds that teachers take more account of student's social behavior (e.g. politeness) and talent when a student is of higher social origin than when he has a less favorable social background. She interprets this result as evidence in favor of Bourdieu's argument of "social reproduction through cultural reproduction". Teachers may report to have taken into account social behavior and talent when making the recommendation for students of higher social origin because they experience "cognitive dissonance" as they have made better recommendations for these students than for students of less favorable background with the same performance.

Second, previous research supports the assumption that teachers take into account *parents' capacities to help their children*. It is assumed that, given the same school performance, students of higher social origin are more likely to receive recommendations for higher secondary school tracks because they perceive the parents of these students to be more capable of supporting their children with school issues (e.g. Duru-Bellat 1996; Duru-Bellat 2002: 80; Neugebauer 2010; Schneider 2011). Quantitative as well as qualitative studies provide evidence in favor of this assumption. For instance, in the analyses of Schneider (2011) and Stahl (2007), marks, test scores and teacher assessments of parental support mediate strong effects of student social origin on the teacher recommendations. Ditton and Krüsken (2006) find that teachers consider parents' assistance when students are poorly performing and the qualitative analysis by Hollstein (2008) shows that teachers consider whether the student's parents are capable of helping when they are not sure about the appropriate school track for a student (see also Nölle et al. 2009). In one specific interview, a teacher says that she considers whether the student's parents are "interested in education" and whether the student has a space to work at home. Furthermore, teachers seem to take into account whether there are older siblings attending higher school types or peers who can help.

Third, *parents' aspirations* are found to have an impact. Dollmann (2011) shows strong effects of parents' answers to a question on whether they would appreciate their child's attending various school types and finds that parental aspirations have a stronger effect on transition rates in federal states with binding teacher recommendations. This result indicates that teacher decisions are considerably affected by parents' aspirations and that parents

possibly put pressure on teachers in view of the binding recommendation. Accordingly, Schneider (2011) hypothesizes that if a student of higher social origin has poor marks, his parents will put pressure on teachers and that parents' exertion of influence increases as the date on which the teachers make their recommendation approaches. To test this assumption, Schneider includes interaction terms of student's social origin and teacher reports of parents' aspirations in analysis of teacher recommendations. He finds that when teachers do not know parents' aspirations, student's social origin has no effect on the recommendation and – in keeping with this result – increasing aspirations of the parents increase the likelihood that the teachers recommend higher secondary school. The coefficients of the interaction terms indicate that parents with high aspirations but more pressure on the teachers.

Ditton and Krüsken (2006, 2009) show that for more than half of the students the planned teacher recommendation does not match parents' aspiration. For one quarter of all students, the teachers modify their planned recommendations and, in turn, for half of these cases, the teachers opt for a “higher” actual recommendation. Overall, parents' aspirations have a strong positive effect on teachers' planned, modified and actual recommendations. Moreover, teachers even seem to adapt the marks to parents' aspirations. The results of Gresch, Baumert and Maaz (2009) show that in federal states where the recommendation is binding teachers more often recommend the higher school track than in states where the recommendation is not binding. Again, this effect may be driven by parents' higher pressure on teachers in these states.

In Hollstein's (2008) interviews, teachers report that some parents start very early in the last school year before the transition to come to teacher meetings and discuss their child's marks and the upcoming school track recommendation. These parents sometimes put considerable pressure on them and it happens that they meet the headmaster to complain or threaten with using a lawyer. When anticipating these cases, teachers prefer to adapt the marks to parent's desires. Similarly, Masson's (1997) qualitative analysis of the dialogue between family and school found that some parents make personal arrangements with the school principle in order to prevent undesired propositions by the staff meeting.

Within the French institutionalized dialogue, families' aspirations are formalized by their school track requests and legal texts incite the school staff to take into account families' requests (see Chapter 2). Therefore and given the results on German teachers' recommendations, families' requests can be expected to have strong effects on school staffs' decisions along the dialogue. Indeed, Roux and Davailon (2001) reveal that the requests have

a strong effect on staff meetings' propositions. Moreover, they find that no student social origin effect remains when family's request is controlled and conclude that the staff meeting does not reinforce social inequality. However, since the effect of social origin is not negative, this indicates that the staff meeting does not reduce too ambitious requests either. This negative sign should appear because families from higher classes make more ambitious requests. Hence, the staff meeting helps the students with most ambitious parents or parents who are willing to reject (see also Duru-Bellat, Jarousse and Mingat 1993). Duru-Bellat and Mingat (1989) not directly analyze staff meetings' propositions but final outcomes of the dialogue (i.e. the actual transition of the student to upper secondary school or grade retention). They find that even when student's performance and family's request are held constant, social class significantly affects the final outcome. This remaining social class effects could be due to social class differences in families' use of their rejection right and the subsequent steps (e.g. headmasters' decisions).

The findings of previous research also support the assumption that certain determinants have stronger effects when student's performance is in the middle-range and thus teachers have difficulties making unequivocal decisions. In respect to the staff meeting's proposition, Perier (1994: 70-71) finds that a large majority of secondary school teachers believes that when students' performance is in the middle-range, their effort must be considered. Dollmann (2011) finds that given high performance-levels neither student's social origin nor the institutional context (binding vs. non-binding teacher recommendation) affects a student's chance to attend upper secondary school. By contrast, given middle and lower performance levels, students with higher educated parents and students who experienced the transition to secondary school when teacher recommendations were non-binding have significantly higher chances to be enrolled in upper secondary school. Ditton and Krüsken's analysis (2006) of teachers' answers to the question on whether making the recommendation was difficult reveals that this is particularly the case when a student's performance lies in the middle range. Moreover, they find that when a student's marks are in the middle-range, teachers additionally take into account students' linguistic and reading abilities as well as their participation in class, motivation and effort. If a student is poorly performing, teachers consider whether parents are supportive. In their study from 2009, they show that it is difficult to form final school track recommendations for students whose performance varied over the last school years. Hollstein's (2008) results indicate that a student's family background is not a core determinant of teacher recommendations but plays a considerable role when a student's performance does not self-evidently tell which secondary school track is most appropriate.

6.3 Grade retention decisions

Literature on the consequences of grade retention and on the traits of retained students is vast. However, there are only few studies that analyze whether families demand grade retention for “strategic” reasons and how teachers react to such demands. The study by Davies, Heinesen and Holm (2002) mentioned above also investigates Danish families’ choices between letting their child attend an extra year in lower secondary education (10th grade) or letting him directly proceed to upper secondary school. Following the relative risk aversion-mechanism, the authors hypothesize that children whose performance lies in middle- and higher-ranges and children of intermediate and higher social origin are less likely to choose attending 10th grade instead of directly entering upper secondary school. This is because they need upper secondary attainments to preserve their families’ social status. For the same reason, if these children have low abilities they will probably opt for the 10th grade in order to improve their chances of succeeding in upper secondary school. By contrast, children of parents with low educational levels will – regardless of their academic abilities – be very likely to choose 10th grade because they may be not sure about whether to attend upper secondary school or vocational education or, if they are sure about vocational education, they may not be certain about which type of vocational education to choose. Interactions of parents’ education and ability indicate that the likelihood of choosing the extra year increases with parent’s educational level, when the child has low abilities and decreases with parents’ education when the ability is moderate or high. Davies et al. interpret this finding as support of RRA-theory and conclude from it “that less able children of more highly educated parents appear to choose an extra year at lower secondary school presumably to increase their probability of eventually passing upper secondary school” (Davies, Heinesen and Holm 2002: 700).

Kloosterman and de Graaf (2010) analyze whether social background of Dutch families has an impact on their choices of grade retention over enrolment in a lower track. They observe families’ decisions at two levels in secondary school and for three cohorts of students. Distinguishing between the three cohorts enables them to assess the impact of a reform that integrated a lower and a higher vocational track into one comprehensive vocational track. From the B&G-model they derive the assumption that higher-class families are more likely to choose grade retention instead of the lower track than families from lower classes. Their findings support their hypothesis that families from higher classes are more likely to choose grade retention over a vocational track. Moreover, they find a positive effect

of school performance on families' choice of grade retention over the lower track and a negative effect of families' choice of grade retention over the higher track. They find no evidence in favor of their assumption that families take into account a specific lower track the student will end up in (i.e. whether this is a track enabling later university studies or not). When the chosen type of school is too demanding, students from higher classes opt for retention to improve while students from lower classes move to a lower track.

Jacob and Tieben's (2009) study on social origin effects on intra-secondary transitions in Germany and the Netherlands addresses grade retention, too. Even though the study does not explicitly focus on grade retention decisions, it examines these indirectly since Dutch students have to repeat a grade if they want to attain a supplement diploma after graduation from a lower track. Moreover, if students have to think about downgrading during secondary education (e.g. because they are poorly performing), they consider the possibility to stay in the same demanding school track and repeat a grade. Following the relative risk aversion-mechanism, the authors posit that parents will choose grade retention instead of enrollment in a lower track, if the lower track would lead to an educational attainment that is lower than that of the parents and hence if status decline would occur. By contrast, students who already are in a higher track than their parents would not choose grade retention because of indirect and direct costs of an additional school year. In the same way, higher class families will choose the supplement diploma even if this implies costs of an additional grade. For both countries the study finds similar strong effects of parental education and the status maintenance motive on choosing the supplement (which implies grade retention in the Netherlands) but no social origin effects on staying in the same track instead of downgrading.

Roux and Davailon's (2001) analysis of the institutionalized dialogue between family and school shows that only 4 per cent of all families demand grade retention while 11 per cent of the staff meetings propose this option. In the end, 12 per cent of the students have to repeat. Grade retention is proposed especially to students with performance in the middle range. The authors argue that grade repetition is a strategy to avoid the vocational track but still families try to avoid repetition as long as possible. Their multivariate analysis reveals that the staff meeting is more likely to propose grade retention to students of higher social origin (i.e. students whose fathers are e.g. chief executives) than to students with working-class background. Holding constant student's social background and performance, family's school track request and other family characteristics, also father's educational attainment has a positive effect on being proposed grade retention.

A recent study by Cayouette-Remblière and De Saint-Pol (2011) also examines whether parents use grade retention to avoid an orientation in lower tracks. The authors explicitly distinguish three types of grade retentions: First, retentions in grades that are no “transition grades”. These retentions have the aim to give students the chance to generally improve their performance. Second, retentions in transition grades, i.e. the 3^{ème} at the transition to upper secondary school and the 2nde. These have the aim to avoid orientations in lower school tracks. Third, retentions after failed exams (at the end of the *terminale* and at the end of the grade that leads to the CAP/BEP). Cayouette-Remblière and De Saint-Pol analyze the secondary school careers from grade 6 to the baccalauréat and identify 11 types of careers. This typology reveals that students who have repeated several grades and finally attend the general *bac* (curriculas “S” or “ES” and “L”) are very likely to have repeated grade 9 and thus to have used grade retention to gain access to the general track. The same seems for students who belong to the career-type “attendance at the general track but dropped out of school before the end” and “attendance at the academic general track (that leads to a general *bac*) but reorientation into the vocational general track (that leads to the technological *bac*). In order to find out whether students are forced to repeat or required grade repetition, the authors also have a look at the dialogue between family and school. Among the type of students who finally attain a general *bac* after having repeated several grades there are comparatively many whose requests did not correspond to the propositions by the staff meeting and who accepted a grade-repetition proposition. Among the students of the type “attendance at the general track but dropped out of school before the end” there are also relatively many who accepted grade repetition proposition.

7 Research framework

7.1 General description of the data and basic sampling

The data I use have been collected in a representative longitudinal study commissioned by the French ministry of education.⁷⁶ The “*panel d’élèves du second degré*” (also called “*panel 1995*”) observed students who entered lower secondary education in 1995 up to their transition to upper secondary school in 1999 (2000 or 2001, depending on whether they have repeated school years). Since the beginning of the 1970s four surveys of similar kind were initiated by the ministry (DEPP 2008: 11). One survey from 1973 and one from 1980 observed students who entered lower secondary school during up to 11 years along their school careers. Another survey was conducted in 1978 that gathered information during 7 years on a cohort of students who entered primary school. In 1989 another survey started to follow students from their entering into secondary education to their labor market entry. This last survey was filled up in 1995 with a large cohort of students beginning primary school and a cohort of 17 830 students starting secondary education. The survey of the 17 830 students is the “panel 1995” and represents the data I use for the empirical analyses of this dissertation. One aim of this latest survey was to evaluate reforms that had been conducted in the early 1990s. As compared to the “panel 1989”, it provides new important variables such as student’s marks in the *brevet*, i.e. the exam at the end of lower secondary school (see Subchapter 2.2).

Since the French ministry of education does not possess exhaustive records of students that could be used for sampling, all French public and private lower secondary schools (*collèges*) were asked to select students according to predefined criteria (DEPP 2008: 11-12). In particular, among the students who were entering the *6ème* (i.e. 6th grade) at the end of the summer 1995, they had to select students born on the 17th of each month (except March, July and October).⁷⁷ The selected students were up to complete the *6ème* during the school year 1995-1996. This sampling gathered 19 770 students of which those who were not attending grade 6 for the first time – i.e. students that actually were starting a repetition of grade 6 – were excluded. Excluding these repeating students lead to a final sample size of 17 830.

⁷⁶ The following description of the “panel 1995” is closely based on its 2008-documentation by the “direction of the evaluation, the prospective research and the performance” (DEPP), which is the statistical research department of the Ministry of Education that conducted the survey. The documentation is provided together with the data by the Centre Maurice Halbwachs, Paris.

⁷⁷ Not only students starting the ‘ordinary’ 5th grade but students in classes called “SES” or “SEGPA” were selected. These classes are integrated in some lower secondary schools to affiliate students whose academic abilities are too low to keep up with the other students.

The “panel 1995” consisted of seven survey parts (DEPP 2008: 12-16). In 1995, the first survey part took place: headmasters of all secondary schools had to fill in a questionnaire that inquired the address of the school and whether it is located in a ZEP (see Subchapter 2.4.2). The headmasters also had to report nationality, gender and other “identifying” characteristics of the selected students, their “school situation” including chosen foreign language course, living in a boarding home, size of the class the student attends, and their score on the national standardized tests that are taken at the entry into grade 5. Moreover, the headmasters were able to provide information on the student’s primary education such as repetition of grades as they typically receive such information from the primary school the student has attended. Finally, they reported – as far as they knew – family characteristics such as parent’s profession, educational attainment and nationality.

The second part of the “panel 1995”-survey is the update of the “school situation” from 1996 onwards. For every school year it refreshed the reports of, for instance, type of the school students attend, class size, number of immigrant students in the class, chosen foreign languages and specializing classes. One way to update the information was to look at student files in the central administrative databases called *Bases Académique d’Élèves*.⁷⁸ If there was no information on the student, the second way was to send a questionnaire to the headmaster. If the headmaster did not return the questionnaire, the families received one.

The third part of the survey – termed *family survey* – provides core variables for the analyses presented in this thesis. Between Mai and September 1998, i.e. around the time when students finished the school year 1997-1998 and grade 8 or the so-called 4^{ème} (if they had not repeated grades), the parents of students that were still followed in the survey had to answer a range of questions regarding (i) the situation of the family (e.g. number of siblings, nationality and place of birth of the student and the parents, parents’ educational attainment, occupation and employment status), (ii) the child’s primary education (e.g. performance in primary school, grade repetition in primary education), and (iii) the child’s secondary education (e.g. performance in secondary school, opinion on parent-teacher relationships, parental involvement such as attendance at official meetings with the teachers, membership in a parent association).

In this part of the survey, data was collected through three steps. In a first step, the schools sent a questionnaire to 17 684 families (DEPP 2008: 13). In a second step, the DEPP

⁷⁸ Typically, these databases are only accessible to the local municipalities. The data is generated as schools yearly provide information on their students. Not all schools do so.

(i.e. the statistical research department of the Ministry of Education) directly sent the questionnaire to families that had not returned the first questionnaire and, in a third step, telephone interviews were conducted with those who even had not returned the second paper questionnaire. Overall, the response rate of the family survey attained 85.6 per cent: 15 290 families generally took part in the survey, 12 980 (85 per cent) of them filled in the paper questionnaire and 2 310 (15 per cent) completed the telephone interview. On the phone, the families were interviewed on a shorter version of the questionnaire. This, as will be outlined below, led to considerable numbers of missing values on some variables.

Another survey part that provided data that is highly relevant for this dissertation's empirical analyses deals with the *dialogue* between family and school (DEPP 2008: 13). In June 1999, it observed the transition from lower to upper secondary education of students who had not repeated grades since their entry into secondary school in summer 1995. Correspondingly, in June 2000 and 2001, it observed students who had repeated either one or two grades up to then. To gather information on the dialogue, questionnaires were sent to the headmasters. With a response rate of 90 per cent (in 1999), they reported families' school track requests, staff meetings' school track propositions, families' rejections of staff meetings' propositions, headmasters' decisions, families' second rejections and recall meetings' decisions. Moreover, headmasters reported students' marks in the "continuous examination" (*contrôle continu*) of the *brevet*. In 2000 and 2001, the response rate decreased to 79 respectively 77 per cent.

Three survey parts followed: First, in summer 2002, all students whose secondary school career had been observed were contacted to respond to questions on their occupational plans, their plans of tertiary education, their experiencing of their secondary education and their self-perception in terms of their ability to find friends, for instance (DEPP 2008: 15). Second, in March 2003, the students who had attained either a "*bac technologique*" or a "*bac general*" and entered tertiary education received a questionnaire that surveyed their perception of the first year in higher education, their educational and occupational plans and the resources they held. Third, the seventh part of the "panel 1995"-survey focused on students who could not be observed during their whole secondary education. Those who had refused to answer the survey in 2002 and those who had reported to have quit education and hence were not questioned in the higher-education survey were contacted again and asked to respond to questions on their actual educational, occupational and personal situation. The data gathered by these three last survey parts is not used in this dissertation's analysis.

In order to generate the samples that I use for the analysis, I exclude students whose families did not *receive* the questionnaire of the family survey in 1998. This reduces the initial sample of 17 830 students by 1 per cent to 17 684 (see above). The exclusion of students whose families did not *take part* in the family survey leads to a reduction of 13.5 per cent and a sample of 15 290 students. Since the central explanatory variable is social class of students' parents, I exclude students who do not live at least with one parent. This causes another decrease of 1 per cent and a reduction of the sample size to 15 123 cases.⁷⁹ Moreover, I exclude cases for which the headmaster did not report the dialogue (2.529 students; 17 per cent). Finally, the *basic sample* consists of 12 594 students living with at least one parent, whose family participated in the 1998 family survey and for whom the headmaster reported the course of the dialogue in 1999 (or in 2000 or 2001 if a student has repeated grades).⁸⁰

7.2 Variables

The presentation of the variables consists of four parts. In part one I list the main dependent variables: families' and the school staffs' decisions along the dialogue. In part two, I outline *core* explanatory variables such as student's social origin and mark on the *brevet*. These independent variables are used in most of the analyses. Part three of the presentation deals with specific variables that are employed only for the test of the theoretical model on families' decision-making. In part four I present the control variables. Table 1, 3, 5 and 6 indicate descriptive statistics of all variables. These descriptive statistics are based on the *basic sample* (N=12594) and show the varying numbers of missing cases. Moreover, the tables report the survey parts that have gathered the information that is used to construct each variable.

7.2.1 DEPENDENT VARIABLES

Choices at each step of the dialogue

As described in Chapter 2, a family's school track request and a staff meeting's proposition can be the general upper secondary school track (LGT), the vocational upper secondary school track (LP), the lower vocational track, i.e. an apprenticeship (A), or grade repetition

⁷⁹ Using information from the family survey in 1998, I excluded students who live with a legal guardian that is not one of the parents, students who live in a foster home and students for whom "other situation" was reported.

⁸⁰ The "panel 1995" is not designed for multilevel analyses that take into account the nesting of students in classes or schools since too few students were surveyed per school. For instance, in 1995 headmasters of 5686 lower secondary schools reported information on 17830 students implying around 3 students on average per school. To still factor in that school effects could affect the multivariate analyses' results, I computed standard errors that are adjusted for school-level clustering.

(GR). In line with French research on the transition from lower to upper secondary school, I combine the two vocational tracks (now abbreviated as LPA). For the analysis of family's exact decision-making and the staff meeting's making of the school track proposition, I firstly only distinguish between the general track (LGT) and the vocational track (LPA). For the analysis of both actors' grade retention decisions, I employ a binary variable that distinguishes between GR and LPA. All of the variables observe students' *first* traversing of the dialogue. Table 1 indicates that clearly most parents demanded the general track (67 per cent) and in fewer cases staff meetings proposed the general track (60 per cent). The least popular request and proposition is grade retention. The staff meetings proposed it more often (6 per cent) than the families demanded it (2 per cent).⁸¹

A family's decisions to reject and to attend the talk with the headmaster are represented by one common binary variable indicating whether the family has rejected and attended the talk (i.e. value 1) or not rejected and not attended the talk (i.e. value 0). Those families who have rejected but not attended the talk are not considered since only families who have attended the talk can obtain a revision of the staff's school track proposition. These exceptional families who have rejected but not attend the talk are few (49 cases). Table 1 shows that 1242 families are entitled to reject the decision since the staff meeting did not accept their request and 30 per cent of them actually rejected.⁸²

⁸¹ I do not differentiate between families' and staff meetings' *preliminary* and *definite* requests or propositions. In fact, the survey on the dialogue reported families' and staff meetings' "first choice" and "second choice" without clearly indicating what is meant by these choices. I use the first choice information. Second choices of families and staff meetings are reported for only around 10 per cent of the students in the *basic sample*. A close analysis of both choices indicates that some headmasters have reported families' and staff meetings' *preliminary* and *definite* choices while other headmasters have reported families' and staff meetings' first and second *preferences* (i.e. the several options they can indicate at one time). In my view, the second choice information is ambiguous and hence I do not make use of it. Still, I have conducted several robustness analyses with variables taking into account both choices. These variables are based on the assumption that headmasters reported preliminary and definite decisions. The variables indicate families' respectively staff meetings' "second choice" instead of the "first choice" if information of the "second choice" is available. Hence, these variables represent families' and staff meetings' "definite" decisions (even though this could be their second preferences, too). Overall, the results of these robustness analyses are similar to the results of the analyses with only the "first choice" information. Relevant variations are that grade retention decisions are more prevalent among families' "second choices" and slightly more prevalent among staff meetings' "second" propositions, too. Moreover, the sample for the analysis of families' rejections (i.e. a sample consisting of families whose LGT-requests were not accepted by the staff meeting) would be smaller. However, the social class effects (and effects of the other explanatory variables) correspond in terms of significance and effect size.

⁸² There are 9 families that rejected and attended the talk although the staff had accepted their demand. These cases were coded as "missing values" so as to have only "valid" cases for families who are formally entitled to and have a reason to reject. These were coded as "missing values" on the rejection-variable. Families who have valid information regarding their attendance at the talk with the headmaster but none regarding their rejection are still valued as having rejected. I assigned a "missing value" on the rejection -variable also to families who have rejected but for whom information on their attendance at the talk is missing. Moreover, while the variables for family's request and staff's proposition aggregate LP and A to LPA, the request -variable considers them separately: Families who demanded LP and were proposed A are taken into account by this variable since they are entitled to reject.

Table 1 Descriptive statistics and survey source of the dependent variables (*basic sample*)

	Mean	Min	Max	Number of valid cases	Survey part
<i>Family's school track request</i>					
LGT	0.67	0	1	12591	Report on the dialogue (June 1999, 2000, 2001)
LPA	0.31	0	1		
GR	0.02	0	1		
<i>Staff meeting's school track proposition</i>					
LGT	0.60	0	1	12593	
LPA	0.34	0	1		
GR	0.06	0	1		
Family's rejection & talk with headmaster	0.30	0	1	1242	
<i>Headmaster's school track decision</i>					
LGT	0.19	0	1	392	
LPA	0.37	0	1		
GR	0.44	0	1		
Family's second rejection (i.e. rejection of headmaster's decision)	0.72	0	1	284	
<i>Recall meeting's decision</i>					
LGT	0.42	0	1	205	
LPA	0.12	0	1		
GR	0.46	0	1		
<i>Final outcome of the dialogue</i>					
LGT	0.61	0	1	12593	
LPA	0.33	0	1		
GR	0.07	0	1		

Note: Due to rounding to two decimal places, means do not always sum up to 1. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

The decision of the headmaster, families' second rejections and recall meetings' decisions are not analyzed by means of regression analyses. They are addressed only in descriptive univariate and bivariate statistics that give an overview over social class differences in students' pathways through the dialogue (e.g. Figure 3). The decisions of the headmasters and those of the recall meetings were operationalized so as to distinguish between LGT, LPA and GR. There is valid information on headmasters' school track propositions for 392 families (Table 1). Regarding the decisions of the recall meetings, the *basic sample* provides valid information for 205 cases. One can note that at these points of the dialogue grade retention is the most popular option. However, while the headmasters reservedly propose LGT (19 per cent), the recall meetings choose this option quite often (42 per cent). With regard to families' second rejections there is valid information for 284 cases and 72 per cent of these actually rejected the headmaster's proposition.⁸³

⁸³ Again, in a few cases the dialogue proceeded in untypical ways or information to understand the whole proceeding was missing. 6 families did not attend the talk but obtained a decision by the headmaster and for 10 families information on the attendance at the talk is missing but the headmaster's decision is known. For this

Another variable is used for the more general analyses of the dialogue: the dialogue's final outcome. Again, this variable distinguishes between LGT, LPA and GR. It corresponds to the decision that has been taken by the staff meeting if there was no first rejection by the family. However, if a family rejected the staff meeting's proposition, the final outcome is the decision of the headmaster and, in the same fashion, the final outcome is the recall meeting's decision if a family rejected a second time, i.e. if it rejected the headmaster's decision. Consequently, the final outcome indicates which school track a student will ultimately attend or whether he has to repeat grade 9. Table 1 indicates that for 61 per cent of the families in the *basic sample* the outcome of the dialogue is the general track; 33 per cent end up with access to the vocational track and 7 per cent of the students have to repeat grade 9.⁸⁴

7.2.2 CORE EXPLANATORY VARIABLES

Family's social class

I operationalize social class according to the EGP-class schema (Erikson and Goldthorpe 1992; Erikson, Goldthorpe and Portocarero 1979). The schema is based on the differentiation of occupations according to their labor-market and work situations (Erikson and Goldthorpe 1992: 41). More specifically, in the EGP-schema, social classes group occupations that are similar regarding income, employment conditions, economic security and promotion prospects (Breen 2005: 36-37). Moreover, they take into account whether occupations imply the possession of means of production or not. Among those who do not hold production means, they differentiate according to the type of relationship between the employer and the employee. Generally, as a consequence of this distinction, classes are defined according to the market resources of their members and hence according to the life chances that depend on these resources (Breen 2005).

Following up on Weber and Marx, the schema undertakes a distinction of class positions along three types of *employment relations* (Erikson and Goldthorpe 1992: 37-38): i)

reason, Table 1 presents more decisions by the headmaster (392) than there were entitling rejections (372 approximately corresponding to 30 per cent of 1242). Still, the headmaster's decision was coded as "missing value" if a family's request, the staff meeting's proposition and the final outcome of the dialogue were the same and if there is no information on the first rejection and no second rejection occurred. Then, the dialogue must have ended right after the staff's proposition. I recoded "missing-values" on the second rejection variable when a family's request and the headmaster's decision were the same. I did so because only families who obtained a decision by the school that does not correspond to their request are entitled to and have a reason to reject for the second time.

⁸⁴ For one per cent of the families the request and the proposition are the same but the final outcome is different and no information on rejections or headmaster's decision is existent. In these cases it is not clear whether the information on the request, the proposition or the outcome is not correct or what happened between these decisions and the ending of the dialogue. Robustness analyses reveal that these cases do not alter the findings on social class effects on the final outcome (see Subchapter 8.1 in the following).

employers, ii) self-employed without employees and iii) employees. The first group buys labor from others, while the third group sells their labor to employers. Consequently, the first group, the employers, has some authority and control over the third group, the employees. The second group neither sells nor buys labor. Among the large group of employees, another important distinction is made between relationships with the employer that are either regulated by a *labor contract* or by a so-called “*service relationship*” (Breen 2005; Goldthorpe 2007b). Typically, the positions of manual and lower-grade non-manual workers are regulated under *labor contracts*. In these short-term employment relationships the employee is paid in wages per hour or “per piece” for “more or less discrete amounts of labor, under the supervision of the employer or of the employer’s agents” (Erikson and Goldthorpe 1992: 41). *Service relationships* are typically found in private and public organizational bureaucracies among the professional and managerial staff (Goldthorpe 2007b: 103). These relationships are rather long-term and are characterized by a “generally more diffuse exchange” of work and money between the employer and the employee (Erikson and Goldthorpe 1992: 41). Notably, the employee is not only paid with specific amounts of money for specific amounts of labor, he or she moreover receives “prospective” returns such as career opportunities, pension rights and pay rise on an established scale.

The full version of the EGP-class schema consists of eleven classes that can be collapsed to versions of seven, five or three classes (Erikson and Goldthorpe 1992: 38-39). For the present analyses, I distinguish six classes. Table 2 presents the EGP-classes the way they are grouped for the present analyses, together with the employment relationship that defines them. My grouping of the initial eleven classes to six classes is in line with the suggestions in the original literature and with recent investigations of social inequality in educational attainment in France. I keep the higher and the lower salariat (EGP-class I and II) separate while I collapse routine non-manual workers of lower and higher grade (EGP IIIa and IIIb) as suggested by Erikson and Goldthorpe (1992). In accordance with Ichou and Vallet (2011) who provide a recent large-scale analysis of trends in educational inequality in France, I add the lower grade technicians and supervisors of manual workers (EGP-class V). The reference category in the following multivariate analyses will be the “working-class” consisting of skilled manual workers (EGP-class VI) and semi- or unskilled manual workers (EGP-class VIIa).

Table 2 Categories of the EGP class schema and form of employment regulation

EGP-Class		Form of employment regulation
I	Higher-grade professionals, administrators and officials; managers in large industrial establishments; large proprietors	Service relationship
II	Lower-grade professionals, administrators and officials; higher-grade technicians; managers in small industrial establishments; supervisors of non-manual employees	Service relationship
IIIa, IIIb, V	Routine non-manual employees, higher grade (administration and commerce) (IIIa), Routine non-manual employees; lower grade (sales and services) (IIIb), Lower-grade technicians; supervisors of manual workers (V)	Mixed types of relationships* (IIIa, V), labor contract (IIIb)
VI, VIIa	Skilled manual workers (VI), Semi- and unskilled manual workers (not in agriculture, etc.) (VIIa)	Labor contract
IVc, VIIb	Farmers and smallholders; other self-employed workers in primary production (IVc), Agricultural and other workers in primary production (VIIb)	<i>No regulation of employment</i> (IVc), agricultural workers (VIIb)
IVab	Petty bourgeoisie: small proprietors, artisans, etc., with employees (a) and without employees (b)	<i>No employment regulation</i>

Note: *Mixed types of relationship are “typically associated with positions intermediate between bureaucratic structures and rank-and-file workforces: for example, those of clerical or sales personnel or of lower-grade technicians and first-line supervisors” (Goldthorpe 2007b: 103-104). *Source:* Erikson and Goldthorpe 1992: 38-39; Goldthorpe 2007b: 104.

As the theoretical model requests a hierarchical ordering of social classes, the class of farmers and agricultural workers (EGP IVc and EGP VIIb) and the class containing (non-agricultural) self-employed and the petty bourgeoisie (EGP IVa and IVb) must be observed separately (Breen and Yaish 2006; Ichou and Vallet 2011). Since farmers, smallholders, small proprietors and artisans have no regulation of employment, they cannot be located in a hierarchical rank order of employees (Erikson and Goldthorpe 1992: e.g. 266). Moreover, it is argued that self-employed and the petty bourgeoisie rather make use of financial capital to maintain their social class position than of education (Ishida, Müller and Ridge 1995). Besides, especially in France where the primary production still constitutes a comparatively important sector, the group of farmers and agricultural workers is characterized by particular educational aspirations, attitudes and careers of their offspring (Brauns et al. 1999; Ichou and Vallet 2011; Roux and Davailon 2001).

The EGP-class schema is held to be a valid instrument for the operationalization of social class in empirical analyses (Brauns, Haun and Steinmann 1997; Goldthorpe 2007b: 102): On the one hand, studies mostly based on British data could provide evidence that supports its *criterion validity* (Evans and Mills 1998; Evans and Mills 2000). They found that

the operationalization of class based on occupation and employment status captures the differences in employment relationships that it is supposed to capture. On the other hand, applications of the class schema to investigate social stratification in various economic and life outcomes could confirm its *construct validity*. It provided evidence in favor of theoretically expected differentials in health, voting behavior, earnings, risk of unemployment, work orientation and class identity (Evans and Mills 1998). In view of this dissertation's the research questions, it is notable that many studies for different countries found the theoretically expected differentials in educational attainment (e.g., Brauns 1998; Ichou and Vallet 2011 as specific examples for France). This underlines the suitability of the schema for the analysis of educational choices.

Moreover, the schema qualifies for the present analyses as it accomplishes the requirements of the theoretical model (Breen and Goldthorpe 1997: 281): First, leaving apart the occupations with no employment regulation (e.g. the petty bourgeoisie and the self-employed), the classes can be hierarchically ordered and, second, this ordering is equally recognized in all classes.⁸⁵ Besides, it is widely acknowledged for the operationalization of social class in European *comparative* research on social stratification (Brauns, Haun and Steinmann 1997; Ichou and Vallet 2011). Finally, the decision-making models applied and tested in this dissertation and the EGP-schema have the same theoretical rationale: Rational Action Theory. The class schema draws, for instance, on the idea that employers and employers' agents draw up employment contracts so as to maximize profits (Goldthorpe 2007b).

For the construction of the EGP-classes using the "panel 1995"-survey, I use a variable that was constructed by the DEPP. As it is common for French data sets, it categorized occupations according to the French official scheme of "*professions et catégories socio-professionnelles*" (PCS).⁸⁶ The DEPP primarily based the PCS-code on information from the

⁸⁵ To support this argument, in their presentation of their theoretical model, Breen and Goldthorpe (1997: 281) refer to Goldthorpe and Hope (1974). This study on occupational prestige in Britain showed that people do, regardless of their class position, indeed perceive occupations as hierarchically ranked. The study was, at the same time, a basis for the construction of the EGP-schema (see Goldthorpe 1980: 40, 64). For France, Chambaz, Maurin and Torelli (1998: 193) find that socioeconomic status has only a very low impact on the evaluation of the prestige of different occupations while age and secondary school attainment have.

⁸⁶ The PCS-schema is an occupation classification employed in the French official statistics. A predecessor version of it – the CSP-schema – was developed in the 1950s for a population census and after some substantial modifications the PCS-classification was introduced in 1982 in the official statistics (Brauns, Haun and Steinmann 1997: 32-41; Desrosières and Thévenot 1996). While the CSP-codes were mainly based on "simple" tabulations of individual professional activity or profession (*activité individuelle* or *métier*) and employment status (*statut*), the final PCS-scheme assigns a four-digit code based on a distinction of 489 categories grouping occupational situations (*situations professionnelles*) that are similar regarding professional activity, employment status, position within the company, industrial sector, etc. (see INSEE 1983 for a more detailed description). The

family survey in 1998. However, when this was missing, it used the reports of the headmasters from 1995. I follow Brauns, Haun and Steinmann (1997) to assign these categories to the EGP-classes (see Table A2 in the appendix for a detailed description of the assignment). Moreover, I identify the one parent with the “higher” social class position using a dominance order proposed by Erikson (1984) and (1992: 266).⁸⁷ In case information for one parent is missing (e.g. for one-parent families), I use information on the other parent.⁸⁸ Table 3

schema has no theoretical foundation of any specific theoretical school. Yet, one of its founders, Jean Porte, speaks of a correspondence between the categories in the schema and “social classes” (Brauns, Haun and Steinmann 1997 referring to Porte 1961).

⁸⁷ The dominance order requires that the occupation of the parent who is full-time employed “dominates” the occupation of the parent who is working part-time and, in turn, that part-time employment has to be considered over no-employment (Erikson 1984: 506; Erikson and Goldthorpe 1992: 265-266). The idea behind this preliminary sorting is that the market situation of a family (which is assumed to define a family’s social class position) depends on the work situations of the family members and that the work situation of the family member that is the most involved in his or her work has the greatest influence on the family’s situation. However, I identify the parent with the higher occupation without considering whether he or she is working full-time, part-time or not at all. I do so for two reasons: First, I suggest that families’ educational decision-making, in particular the relative risk aversion-mechanism, is oriented towards the higher occupation regardless of whether the parent concerned is actually working in that occupation. And nevertheless, for reasons of efficient intra-couple division of labor, typically the parent with the higher occupation is working more than the one with the occupation that provides fewer earnings. Hence, the number of cases with a non-working parent with the higher occupation can be expected to be quite small. Second, as the employment status can be supposed to strongly influence the economic situation of a family and since this affects the educational decision through the cost-parameter C in the model, I make use of the employment status as a proxy for the family’s economic resources. Hence, parents’ employment status is taken into account but utilized for other purposes. The employment status-variable is presented further below. Besides, information on whether employed parents work full-time or part-time is provided only by the paper questionnaires of the 1998 family survey; in the telephone interviews the question was not asked. Therefore, using this information would have led to many additional missing cases. Finally, the dominance order by Erikson and Goldthorpe combines EGP I and II, EGP V and VI as well as EGP IIIb and VII which I need to keep separate to be able to generate class combinations that form the six classes presented above. Hence, the dominance order I apply is more detailed but still in line with the suggestion in the literature. The exact order is: I, II, IVab, IVc, IIIa, V, VI, IIIb, VIIa, VIIb.

⁸⁸ The traditional way to assign a social class to a family was – and partly still is – to uniquely use the occupation of the father (or male “head” of the household) and not of the mother. This was the case since for long the father or husband was perceived to be the “breadwinner” and the mother or wife, even when employed, was supposed to be more oriented towards childrearing and housekeeping (Erikson 1984). With the sharp raise of female employment in some countries and the decline of the rate of housewives, it appeared increasingly important to take into account the wife’s occupation when a family’s social class is defined. Today, it is argued whether it is correct to use the “dominant” class position among the parents to operationalize social origin of a child. An argument against the assignment based on the “dominant” class is that due to the fact that the EGP-classes cannot be ranked in a strictly hierarchical order, it is not possible to identify the parent with the higher class (e.g. Van de Werfhorst and Hofstede 2007: 400). However, Erikson and Goldthorpe (1992: 237, 265) advance that they “regard the conjugal family as being class unitary...this does not necessarily mean adhering to the practice of automatically referring to the class of the conjugal family by reference to that of the husband/father” and that taking account only of the father’s class implies that he is the “head” of the household and results in ignoring all families without a father or with an employed mother being the “head”.

Proponents of a “joint measurement of shared family class position” advance that defining a family’s class position only by the *one* parent with the higher occupation neglects the accumulation of relevant economic and cultural resources through both occupations of the parents (Beller 2009). For instance, they advance that a family with one parent belonging to a lower class and one parent belonging to a higher class possesses fewer resources than a family with two parents from a higher class. Although there is convincing empirical evidence supporting this argument (see Beller 2009), I hold on to the “dominance-approach” for two reasons. First, as pointed out by Erikson (1984: 512) and others, a joint measurement would lead to a “rather incomprehensible set of categories”. Second, and most importantly, I agree that the accumulation of cultural resources is relevant for the generation of social class differentials in ability and school performance, i.e. the primary effects, and that a family evaluates

reveals that 20 per cent of the students in the *basic sample* belong to EGP I, 12 per cent are from EGP II, 32 per cent belong to EGP III and V, 4 per cent are farmers and agricultural workers (EGP IVac VIIb), 9 per cent are self-employed and petty bourgeoisie (EGP IVa, b) and 23 come belong to the working class or have no profession (EGP VI, VIIa and no profession).⁸⁹

School performance

I use marks and repetition of school years as *general* measures of school performance. Marks will not only be used for a general operationalization of school performance, but as proxies for family's subjective evaluation of the likelihood that the school will accept their LGT-request (i.e. the parameter l in the model of family's decision-making) and for staff meeting's evaluation of a student's chance of succeeding in the general track (i.e. the parameter a in the staff meeting's decision-making model).

The survey on the dialogue in summer 1999 (2000/2001) provides information on students' results on the first part of the *brevet*-exam, i.e. the "continuous exam" (see Subchapter 2.2). This first part consists of a summing up of the marks the student received in grade 8 and 9. Hence, the measure I employ already is the average of the student's marks from grade 8 and 9.⁹⁰ In France, marks usually range from 0 (lowest) to 20 (highest). The average of every student's mark in French and in mathematics is calculated. Information on the mark in first foreign language is provided in the data, but due to many more missing values on this variable as compared to the other two (which, moreover, have missing values on the same cases), I make no use of it. Missing information on marks in mathematics and French would reduce the *basic sample* to a size of 11 877 (Table 3).

the costs of education based on its *joint* economic resources, but I give more importance to the assumption that the core part of educational decision-making, namely the desire to maintain the family's social status, is driven by the family members' evaluation of the *one* higher occupation and the status that the family associates with it. This evaluation of one's class position, I suggest, is not one of an "amount" of resources.

⁸⁹ Parents with "no profession" consist of those who never worked, generally have no occupation, whose occupation cannot be assigned a PCS-code to or who are not known or died. Very few students have two parents with "no profession". Sensitivity analyses reveal that assigning them to the working class does not alter the results at all.

⁹⁰ At first sight, it seems unfavorable that the marks cannot be disentangled for every grade. However, I argue that this is exactly the indicator of student's performance that the schools are requested to consider when making their school track propositions. I assume that the school staff thinks that considering the marks of two grades provides a better general picture of the student's performance than looking at marks at only one time point. Apart from that, as the students take the second part of the *brevet* at the end of the school year, neither the families can consider the results of the *second* part when they make their request (in January), nor the schools can it consider when they make the school track propositions in spring.

Table 3 Descriptives and survey source of the core explanatory variables (*basic sample*)

	Mean	SD	Min	Max	Number of valid cases	Survey part
<i>Social class</i>						
EGPI	0.20		0	1	12594	
EGPII	0.12		0	1		Family survey (1998), completed with headmaster survey (1995)
EGPIII, V	0.32		0	1		
EGPIVc, VIIb	0.04		0	1		
EGPIVa, IVb	0.09		0	1		
EGPVI, VIIa, no-EGP	0.23		0	1		
Mark	11.03	(2.78)	0.85	19.5	11877	
Previous grade repetition	0.22		0	1	12591	Report on the dialogue (June 1999, 2000, 2001)
<i>Parental education</i>						
Lower	0.37		0	1	12342	Family survey (1998)
Intermediate	0.33		0	1		
Higher	0.30		0	1		
<i>Education of parent who attends meetings</i>						
Tertiary degree	0.23		0	1	12044	Family survey (1998)
Baccalauréat	0.16		0	1		
Vocational qualification	0.36		0	1		
Elementary education	0.17		0	1		
Other or no person involved	0.09		0	1		
Parents' evenings	0.85		0	1	12525	
Parents' initiation of meetings	0.33		0	1	12471	Family survey (1998)
Teachers' initiation of meetings	0.18		0	1	12466	Family survey (1998)
PA-membership	0.16		0	1	12537	Family survey (1998)
Parent representative in staff meetings	0.10		0	1	10759	Family survey (1998)
<i>N</i>	12594					

Note: Due to rounding to two decimal places means of some categorical variables not sum up to 1. *Source:* Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

As a second indicator of student's school performance, the variable "previous grade repetition" tells whether a student has repeated 1 or 2 years in lower secondary school. This variable does not capture grade repetitions that were decided through the dialogue since the analyses concentrate on students' *first* traversing of the dialogue. For purposes of simplicity, I do not distinguish between repetition of one 1 year and of 2 years. I recode with "1" students who repeated 1 or 2 years up to grade 9 and with "0" students who did not repeat any grade in that time. Table 3 shows that 22 per cent of the students in the *basic sample* have repeated 1 or 2 grades during lower secondary school.⁹¹

⁹¹ To identify the students who have repeated grades, I used the information on students' traversing of the dialogue: When a student attained the dialogue for the first time, i.e. when his family made a school track request in summer 1999, I labeled him as "not having repeated any grades"; when the family of a student made its first request one or two years later, I labeled the case as "having repeated one or two grades" (i.e. "0"). Consequently,

Parental education

As proxies for parents' *cultural capital* or, more specifically, their ability, knowledge, experience and confidence in dealing with school staff, I build two variables using parents' educational attainment. The first variable combines the father's and the mother's highest educational degrees; the second variable indicates the educational degree of the parent who attends meetings with the teachers. The information the two variables are based on stems from the family survey in 1998.

I argue that parents' educational attainment is a reasonable indicator for the cultural capital that parents can make use of in their interactions with the school because it indicates how much time they have spend in the educational system and how successful they were. The higher their educational attainment, the more time they have spent in school, the more experience in communicating with teachers and other school staff and the more formal and informal knowledge they have acquired. By contrast, parents who were unsuccessful and made negative experiences in school feel uncomfortable in the school context, do not trust the educational system and even may perceive interactions with teachers as "painful" (see e.g. Lee and Bowen 2006; Reay 2005 and other literature presented in Subchapter 3.1.3).⁹²

As opposed to the social class-variable, the parental education-variable combines information on both the father and the mother and hence it takes into account the *accumulation* of resources through both parents (see Beller 2009). This operationalization is in line with the original theory (see e.g. Bourdieu 1966: 326). Moreover, I suggest that it is appropriate for analyses of family-school interactions: for instance, two higher educated parents will be more successful in dealing with the school staff than a higher educated single-parent or a couple with "mixed" educational attainment because they can exchange their own knowledge and better support each other.

Following Caille (1992) who examined social class differences in parental involvement with a similar data set (the "panel 1989" survey conducted by DEPP), I combine the highest educational attainment of the mother and the father so as to build three categories: (1) "higher

the number of "missing values" on the repetition-variable corresponds to that on the variable of family's request (12 591). Moreover, one has to note that repetition in primary school or delayed enrolments in primary school are not taken into account. I suggest that families and the school staff mainly concentrate on indicators of school performance that reach back only in secondary education.

⁹² In a recent study Bukodi and Goldthorpe (2012) show that parental education, social status and social class are no interchangeable social origin measures and argue that parental education represents "educational resources" such as knowledge of the educational system when it is included in analyses together with social origin and social status. As social status represents an individual's perception of social superiority, equality or inferiority and social status is not included in the analyses of this dissertation, I assume that the education effect also captures parents' feeling of social superiority, equality or inferiority towards the school staff and other parents.

education” including students with two parents having at least a *bac* and students with one parent having a tertiary diploma; (2) “intermediate education” containing students whose both parents have a CAP, BEP or BEPS and students with one parent having a *bac*; (3) “lower education” consisting of students with two parents with no attainment and students with one parent who is equipped with a CAP, BEP or BEPC.⁹³ Table 3 shows that, in the *basic sample*, 30 per cent of the students live in a family with a “higher” educational level, 33 per cent of the families have an “intermediate” educational level, and 37 per cent of the students have a “lower” educational background. In the multivariate analyses “lower education” will be the reference category.

In order to construct an alternative variable that operationalizes the cultural resources that parents make use of in dealing with school staff, I combine information on which one of the parents attends meetings with the teachers with information on the highest educational attainment of that parent. In the 1998 family survey parents were asked whether, since the beginning of the school year, they have had the chance to talk to their child’s teachers at one or more of the following three opportunities: first, at meetings with the teachers they have initiated themselves, second, at meetings that were initiated by the teachers and, third, at the official parent-teacher meetings or “parents’ evenings”. Those parents who agreed on one of these three options were asked which family member went to the meetings. Combining this answer and information on the educational attainment of the concerned family member(s), I generate a variable with 5 categories: The first category “tertiary degree” includes students of whom the parent that came to the meetings has a tertiary degree. The second category “baccalauréat” consists of students with an involved parent having a general, technological or professional *bac*. The third category “vocational qualification” includes students whose involved parent has a CAP, BEP, BEPC (see Chapter 2). The fourth category “elementary education” includes students with an involved parent who either has no educational degree at all or a diploma of elementary education. Finally, the fifth category consists of students of whom neither the mother nor the father went to the meetings but possibly another person came to the meetings. It is labeled “other or no person involved”.⁹⁴

⁹³ If information on one parent is missing, I assign the students with the one parent having a tertiary diploma to category (1), students with the one parent having a *bac* to category (2) and students whose one parent has at most a CAP, BEP or BEPC to category (3).

⁹⁴ If both of the parents came to the meetings, I identified the parent with the “higher” attainment. Consequently, a student is assigned to the “baccalauréat”-category if, for example, both of her parents attend the meetings and her mother has a BEP, while her father attained a *bac*. Moreover, the variable concentrates on the involvement of the father and the mother. If, for instance, the mother is attending meetings *and* another family member (e.g. a sibling), the variable only takes into account the mother’s educational degree. The idea behind this construction is that the involvement of a parent typically “dominates” that of other persons who are not parents, if both are

Among the families in the basic sample, 9 per cent have another family member involved or no person at all is involved (see Table 3). For 23 per cent of the students a parent with a tertiary degree is involved, while for fewer students a parent with a *bac* or at most an elementary degree attends the meetings. Most of the parents who are involved have a vocational qualification (36 per cent among all families).

Parental involvement

I make use of five variables that identify five different kinds of parental involvement: (1) attendance at parents' evenings (i.e. the regular official parent-teacher meetings), (2) parents' initiation of meetings with the teachers, (3) attendance at punctual meetings that were initiated by the teachers (i.e. meetings of only parents of one student and her teacher(s)), (4) attendance at staff meetings as parent representative, and (5) membership in a parent association (PA). Each of these variables is a dummy-variable indicating with "1" that a student's parents are involved in the specific way and denoting with "0" that they are not. Information to operationalize the first three involvement types were obtained from a measure that was described above: In 1998, parents reported whether, since the beginning of the school year, they have talked to their child's teachers at meetings that they have initiated, at meetings that were initiated by the teachers and/or at the parents' evenings. To construct the other two variables – "parent representative (in the staff-meeting)" and "PA-membership" – I used also the data obtained from the family survey in 1998. The person who filled in the questionnaire was asked whether he or she is member in a PA and whether he or she is parent representative at the staff meetings.⁹⁵

As indicated in Table 3 "attendance at official meetings" is a very common involvement type: 85 per cent of the families with valid information on this variable have at least one parent attending these events. Since the beginning of the school year (i.e. 1997/1998) considerably fewer parents have initiated meetings with the teachers or attended meetings that were initiated by the teachers (33 per cent respectively 18 per cent). Moreover, 16 per cent of the cases with valid information on the corresponding variables indicate a membership in a PA and 10 per cent indicate being parent representative. The high number of missing values

involved. First, the parents – who typically make the school track choice – will take more account of their own encounters with the teachers than of those of the grandmother, for instance. Second, the teachers certainly see the parents as more responsible for the student than his siblings, for example, and, hence, their school track decision would be more affected by the parents' involvement than by that of another person, if both were involved.

⁹⁵ Since the question is formulated in a way that does not clearly indicate whether both parents are meant or only the parent who is filling in the questionnaire, one cannot surely infer that no one is involved when "n" was answered. However, I assume that if the parent who is not filling in the questionnaire would be member in a PA or parent representative, still the answering parent would tick "yes".

on the latter variable (10 759 valid cases) is due to the fact that the question was only asked in the paper questionnaire and not in the subsequent telephone interviews that were lead to reduce the non-response rate (DEPP 2008: 50). Since including this variable in the regression models will considerably reduce the sample size, it will not always be taken into account.

Table 4 reveals the inter-correlations of the different kinds of involvement. All associations are highly significant. Taking into account the strengths and the signs of the correlations, one can discover a pattern: On the one hand, initiations of meetings by teachers and by parents are highly positively correlated with each other, while they are negatively correlated with all other types of involvement. On the other hand, PA-membership and being parent representative are highly positively correlated.⁹⁶ Attendance at parents' evenings seems to stand somewhat apart as it is only marginally correlated with the other involvement types. Still, it is more correlated with PA-membership and being parent representative. Moreover, this association is positive while its relationship with the other two involvement types is negative and weaker.

I suggest that the pattern indicates two groups of involvement. One group includes involvement types that are motivated by student's school performance. When a student is performing poorly, either the parents or the teachers may think that it is important to talk with each other, in particular as the transition to upper secondary school is approaching. The second group consists of ways of involvement that gives parents the chance to actively influence their child's schooling environment and career. Chapter 8 will present analyses of social class differences in the different involvement types and "reasons" for parents to become involved in these ways.

⁹⁶ Notably, 85 per cent of the parents who are parent representative are also member in a parent association, or 50 per cent of the parents who are PA-members are parent representatives attending the staff meetings.

Table 4 Pairwise spearman correlations of the five types of parental involvement (number of observations in parentheses)

	Parents' evenings	Parents' initiation of meetings	Teachers' initiation of meetings	PA-membership	Parent representative in staff meetings
Parents' evenings	- (12525)				
Parents' initiation of meetings	-0.0306* (12459)	- (12471)			
Teachers' initiation of meetings	-0.0888* (12459)	0.2507* (12461)	- (12466)		
PA-membership	0.1271* (12486)	0.0733* (12431)	-0.0365* (12427)	- (12537)	
Parent representative in staff meetings ⁹⁷	0.1066* (10708)	0.0856* (10653)	-0.0379* (10648)	0.6173* (10738)	- (10759)

Note: Significance: * p<0.00. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

7.2.3 VARIABLES “DIRECTLY” TESTING THE MODEL ON FAMILY’S DECISION-MAKING

Given the large sample size, the “panel 1995” can be valued as a rich data set that suits ambitious multivariate analyses. However, it does not provide variables that enable a direct operationalization of all decision-making parameters. As shown in Subchapter 6.1.2 on previous tests of the decision-making models, it is generally very difficult to directly test decision-making processes with secondary data. Therefore, most suitable proxies have to be used. In this section, I present the variables that I use to approximate a “direct” operationalization of the parameters that are required by the model on family’s making of the school track request. Since none of the parameters was measured in an ideal way, I have to make relatively strong assumptions linking the measures and the theoretical constructs. Moreover, the results of the “direct” tests will have to be interpreted with caution (e.g. Becker and Hecken 2009b; Stocké 2007).

Subjective probability of success (p)

As a proxy for parents’ subjective evaluation of their child’s chances to succeed in the general track, I use parent’s assessment of their child’s school performance. In 1998, parents had to rate their child’s performance in the actual school year by answering whether they

⁹⁷ For purposes of simplicity, in the following I only term this variable with “parent representative”.

think that their child is (1) “a student that has a lot of difficulties”, (2) “a student that has some difficulties”, (3) “a good student”, or (4) “an excellent student”. Based on this question I generate a variable with a 4-point scale. In the *basic sample*, the mean subjective performance assessment by the parents is 2.6 (Table 5).

Ideally, to measure parents’ evaluation of their child’s chances of success, I would use parents’ answers to a set of items such as “how likely do you think that your child is to successfully complete the *general upper secondary school track*?”, “how likely do you think that your child is to successfully complete the *vocational secondary school track*?”, and “how likely do you think that your child is to successfully complete the *lower vocational track*?” (see Becker 2003; Becker and Hecken 2009b; Need and De Jong 2000; Stocké 2007). According to Manski (2004) researchers should use self-reports of subjective probabilities for the empirical identification of decision-making processes. He bases this assumption on his research revealing that the common approach (in economics) – which does not employ such direct measures – has several difficulties: Since individuals’ observed behavior can often easily be explained with alternative mechanisms, the common approach has to rest on strong assumptions linking individuals’ observed behavior with their non-observed subjective expectations. Defending these “measurement-assumptions” is often not easy as a lot of evidence usually can contradict them (see Manski 1994 as an example for such evidence).

Even though I have no “ideal” measure of parents’ subjective expectations of success, I still can use a *subjective* performance assessment instead of the typical objective measures (e.g. test scores and marks). This has advantages: It takes into account that there may be class-specific deviations of a student’s *perceived* performance from her *actual* performance and, consequently, of perceived likelihood of success from actual likelihood of success. Although there is no strong evidence for such “biases” (e.g. Stocké 2007) and objective achievement measures were found to strongly determine student’s formation of schooling expectations (Stinebrickner and Stinebrickner 2012; Zafar 2011), I suggest that using a subjective measure of performance comes closer to the concept of “subjectively expected likelihood of success” as it would ideally be operationalized than objective measures. Moreover, the simultaneous use of marks and parents’ subjective performance assessment enables me to distinguish – to a certain degree – the effects of the likelihood that the teachers will propose the general track (I) and the chances of student’s success (p) on families’ school track demands.

Table 5 Descriptives and survey source of the variables exclusively used in the analysis of family's decision-making (basic sample)

	Mean	SD	Min	Max	Number of valid cases	Source: survey part
Parents' performance assessment (<i>p</i>)	2.60	(0.80)	1	4	12487	Family survey (1998)
Number of siblings (<i>C</i>)	1.86	(1.38)	0	16	12516	Family survey (1998)
Employment status (1=no parent working; 0=at least on parent working) (<i>C</i>)	0.07		0	1	12586	Family survey (1998)
<i>Educational motivation (c*SD)</i>						
None	0.50		0	1	12344	Family survey (1998)
Intermediate	0.13		0	1		
High	0.37		0	1		
Knowledge of right to reject	0.81		0	1	12505	Family survey (1998)
<i>Opinion on parent-teacher relationship</i>						
Better not meet	0.12		0	1	10455	Family survey (1998)
Meet when problem	0.37		0	1		
Meet frequently	0.51		0	1		
N	12954					

Note: Due to rounding to two decimal places means of some categorical variables not sum up to 1. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Family's financial resources to account for C

Since the data do not provide a measure of parents' subjective evaluation of their economic possibilities to bear the costs of sending their child to the general track, I use number of siblings (Becker 2000; Becker 2003) and parents' employment status to capture family's financial background. Both variables are generated using information obtained from the 1998 family survey.⁹⁸ The theoretical background of this proxy is the "resource dilution hypothesis". This hypothesis argues that the empirically established negative association between number of siblings and educational outcomes is due to the fact that more children imply less available economic, social and cultural resources per child (e.g. Blake 1981; Blake 1985; Blake 1989; Downey 1995; Downey 2001; Jæger 2009a). Notably, it was found that

⁹⁸ In fact, in the 1998, family survey parents were asked about the adequacy of the family's financial resources to bear the costs of the educational career that their child has planned (DEPP 2008: 44). This variable is not appropriate as it already captures the child's specific educational plans and hence the family's planned educational decision. Ideally, the survey would have asked whether the family's resources are adequate for letting their child specifically attend the general track or university (see Stocké 2007, for instance). As I have to *indirectly* test the effect of *C*, I need a measure of family's economic means to pay for the child's education. A very good variable for this purpose would be family income. Unfortunately, the "panel 1995" does not provide such information either.

parents of many children are less able to fund their children's higher educational careers (Steelman and Powell 1989; Steelman and Powell 1991). In the *basic sample* the average number of brothers and sisters is 1.86 (Table 5).⁹⁹

The employment status-variable distinguishes between families with at least one parent who is working (value "0") and families with no working parent (value "1"). The information used stems from the family survey in 1998. "Not working" or "not employed" defines parents who are – at the time of the survey, i.e. in spring or summer 1998 – students, non-paid interns, unemployed, early retired, retired who were (before retirement) employees or self-employed and parents in "another situation". Single-parent families are treated as two-parent families. This implies that one-parent families in which the single-parent is working belong to the category of working parents and if a single-parent is not working the family is assigned to the category of non-working parents. As shown in Table 5, 7 per cent of the students in the *basic sample* live in a family with no working parent.¹⁰⁰

*Educational motivation (c*SD)*

To operationalize a family's *educational motivation* which corresponds to a family's "need" that the child attends the general track in order to preserve the family's social class position, I use parent's answer to the question "which educational attainment is necessary to find a job". The idea behind the use of this item is that "not finding a job" – which means unemployment – represents the costs of status decline (*SD*) and the answer, i.e. the educational attainment that is necessary for finding a job, indicates the likelihood that the costs of status decline emerge if the general track is not completed ($c=1$).

The variable I construct has three categories. The first category includes parents who answered "no attainment", "CAP/BEP", "professional *bac*" and "don't know". This category identifies families who have no educational motivation regarding LGT. I assume that the parents who gave these answers do not think that they need their child to attend the general track to maintain the family's social status. The second category contains parents who answered "general *bac*" and "technological *bac*". This category indicates parents to whom it

⁹⁹ The variable I constructed to indicate number of siblings also includes brothers and sisters of the student who do not live in the household and half-siblings. It was not possible to identify only the number of biological siblings living in the household. Still, I argue that this measure is appropriate since parents often financially support children who do not live at home because they are studying, for instance.

¹⁰⁰ In the *basic sample* valid information on the employment status of 12 248 mothers and 11 232 fathers exists. Among the mothers 31 per cent are not employed and among the fathers only 8 per cent do not work. Of the non-working mothers 71 per cent answered "other situation" what mainly seems to indicate that they are "housewives"; 21 per cent reported that they are unemployed; 3 per cent are (early) retired. Among the non-working fathers 49 per cent answered being unemployed; 20 per cent reported "other situation" and 24 per cent said they were (early) retired. The other reasons for not working are very marginally represented.

is important that the child attends the general track and thus who have *some* educational motivation. The third category identifies parents with a high educational motivation. It contains parents who answered that a tertiary attainment is necessary for finding a job. I propose that these families see a very high need in having their children attend the general track because this is the very least diploma that is necessary for higher education. Table 5 shows that 50 per cent of the families in the basic sample have no educational motivation, while 13 per cent have an intermediate level of educational motivation and 37 per cent have a high level of educational motivation.

As concluded in the chapter on previous research, it is very difficult to analyze the *relative risk aversion mechanism* or the effect of the costs and likelihood of status decline with secondary data. The measure that I propose is certainly not better than those used in previous literature. One drawback of my operationalization is that only one variable is supposed to capture the interdependent effects of both parameters SD and c . An “ideal” set of items to measure the amount of costs SD would be “how much would it bother you if your child does not attain an occupation that implies a higher social class position?”, “how much would it bother you if your child does not attain an occupation that implies an intermediate social class position?” and “how much would it bother you if your child does not attain an occupation that implies a low social class position?” and so on. To measure the likelihood of status decline an “ideal” survey-question would ask “how likely do you think it is that a person who has not completed the general track attains an occupation that implies (i) a higher social class position, (ii) an intermediate social class position or (iii) a lower social class position?”.

Still, the item I employ is a compact and sufficient proxy for the weighted costs of status decline or – in positive terms – the educational motivation because it is a *subjective* measure and because it contains an aspect that represents the costs of status decline and an aspect that represents the likelihood of status decline. I make the strong assumption that being unemployed means practically no costs of status decline to families from the lowest class but it means the full amount of costs to families from higher social classes. If a family answers that tertiary education or having a general or technological *bac* is necessary to find a job, it thinks that not attending the general track is very likely to cause the costs of status decline. By contrast, if the family answers that less than a general or technological *bac* is necessary, it says that not attending the general track will not cause the costs of status decline. To permit some more variation, I distinguish between families who think that a tertiary degree is necessary and families who consider only a general and technological *bac* to be necessary. In

the following, I speak of “educational motivation” ($c*SD$) as a positive parameter and not of the “weighted costs of status decline” ($c*(-SD)$) which represent a negative parameter because the original item in the survey and the constructed variable indicates a *utility* and, hence, a positive parameter that the families attach (or do not attach) to the general track.

Opinion on parent-teacher relationships

In the analyses of social class effects on parental involvement and families’ decision-making I make use of an additional variable to capture parents’ resources for dealing with the school staff. I suggest that parents’ opinion on parent-teacher relationships can shed light on the reasons why parents get involved and on the degree to which they get involved. In turn, this information hints at parents’ *cultural capital* to become involved.

In the family survey in 1998, parents had to choose one item (out of five) that corresponds the most to their opinion. I condensed the original variable to one with three categories: (1) “Better not meet teachers”, (2) “meet teachers when there is a problem”, and (3) “meet teachers frequently”.¹⁰¹ Table 5 indicates that in the *basic sample* only 12 per cent of the families think it is better to not bother the teachers, 37 per cent of the families believe that teachers should be contacted when the child meets problems in school and 51 per cent are of the opinion that parents and teachers should closely work together. Unfortunately, the question was asked only in the paper questionnaire and therefore in the *basic sample* there are only 10 455 cases with valid information on the variable.

Parents’ knowledge of the right to reject

As indicated before, one important facet of *cultural capital* is their knowledge of the functioning of the educational system. Notably, within the dialogue, families’ knowledge of whether they have the right to reject the staff meeting’s proposition can be expected to influence their decision-making and to contribute to the generation of social class effects on their school track requests and their decision to reject (see Subchapter 5.1.4). In 1998, the parents had to answer the following question: “Do you think that, at the end of grade 9, the parents have the right to recall a school track decision that is not all right with them?”. The answering options were “yes”, “no” and “don’t know”. I construct a binary variable indicating

¹⁰¹ The wording of the original five items is: (i) “The teachers have so much to do with their students that they cannot solve all problems. Meeting them does not change much.” (ii) “It is better to let the teachers do their work and to inconvenience them as rarely as possible.” (iii) “Parents should meet the teachers as soon as there is a problem.” (iv) “It is important for the parents that they build up a good communication with the teachers and meet them even when there is no problem.” (v) “Teachers can do their work only in close collaboration with the parents. Therefore, they should meet very frequently.” Category (1) of the newly build variable contains items (i) and (ii), category (2) includes item (iii), and category (4) combines items (iv) and (v).

whether the parents know their right to reject (i.e. they answered “yes”), respectively whether they do not (i.e. they answered “no” and “don’t know”). A very large part of the families knows its right to reject (81 per cent, Table 5).

7.2.4 CONTROLS

A first control variable operationalizes student’s immigration background. In France, as in other European countries, families of immigration origin have, on average, lower social class positions and children with immigration background reach lower educational attainments than native families and students (e.g. Brinbaum and Kieffer 2009; Brinbaum and Kieffer 2005). Moreover, in France as in several other countries, non-native families were found to have significantly higher educational aspirations when school achievement and social class is controlled (Brinbaum and Cebolla-Boado 2007; Brinbaum and Kieffer 2005: 28, 29; Vallet and Caille 1996). Also, at the transition to upper secondary school, when marks are held constant, students with an immigration background are found to be significantly more likely to gain access to the general track than native students (Brinbaum and Cebolla-Boado 2007: 79; Brinbaum and Kieffer 2005; Duru-Bellat 2002; Vallet and Caille 1996). Beyond that, immigration background is associated with central mediator-variables such as parental involvement: for instance, parents of students who have no French nationality are less likely to initiate meetings with teachers and to attend meetings that were initiated by the teachers (Caille 1992).

Using information from the family survey in 1998 on parents’ nationality and country of birth, I construct a dummy-variable that denotes with “1” students who have two parents of French nationality who were born in metropolitan France and with “0” students with immigration background. This group consists of students with parents from the French overseas territories and the Maghreb, students with two parents of foreign nationality and born abroad, and students of mixed origin. The students with a “mixed” background are students with one parent of French origin and one parent from the French overseas territories and the Maghreb or of foreign nationality and born abroad.¹⁰² In the basic sample, 77 per cent of the students have a French origin (Table 6).

¹⁰² Studies focusing on ethnic inequalities in education typically further split up families with immigration background (see e.g. Brinbaum and Kieffer 2009 who use the ‘panel 1995’ and Barg 2012). They build a group labeled ‘French nationality, born abroad / foreign nationality, born in France’ including parents from the French overseas territories, and differentiate between European immigrants, notably from Portugal, and non-European immigrants being mainly from the Maghreb. Both immigrant-categories consist of students with two parents of foreign nationality and born abroad. Also, the studies look separately at students of mixed origin. I collapse all of

Table 6 Descriptives and survey source of the control variables (basic sample)

	Mean	Min	Max	Number of valid cases	Survey part
French origin	0.77	0	1	12555	Family survey (1998)
ZEP-school	0.10	0	1	12594	Yearly update of the “school situation”
Private school	0.20	0	1	12594	Yearly update of the “school situation”
<i>City size (nb. of inhabitants)</i>					
< 5,000	0.20	0	1	12594	Yearly update of the “school situation”
5,000-20,000	0.18	0	1		
20,000-200,000	0.27	0	1		
>200,000, Paris	0.35	0	1		
N	12594				

Note: Due to rounding to two decimal places the categories of some variables do not sum up to 100 and some percentages do not correspond to absolute numbers. *Source:* Panel national 1995 d’élèves du second degré, Ministère de l’Éducation nationale, DPD; own calculations.

Two other control variables indicate what school type a student attends in the year he or she traverses the dialogue. One school-type variable denotes whether the student attends a school located in a ZEP, i.e. an “education priority zone”, and the other school-type variable indicates whether the student is enrolled in a private school. The used information is obtained from the survey-part that updates the every-year “school situation” of the students from 1996 onwards. Table 6 indicates that 10 per cent of the students in the *basic sample* are enrolled in a ZEP-school and 20 per cent attend a private school.

These school types should be considered for several reasons (see also Subchapter 2.4). Families’ relative freedom of school choice contributes to social segregation in schools because higher-class families try to enroll their children in schools with “favorable” social compositions (e.g. Van Zanten 2002). As one of families’ school choice strategies is to send their children to private schools, more children of higher social origin tend to attend private schools than children of lower social background (Héran 1996; Meuret, Broccolichi and Duru-Bellat 2001; Tavan 2004a; Tavan 2004b). Since ZEP-schools are located in districts with high rates of disadvantaged families, the average student social origin tends to be lower in ZEP-schools than in common public schools (e.g. Guillaume 2001). Schools’ social composition not only affects students’ performance but the selection procedures at the transition to upper secondary school, too: In schools with high rates of lower class children, secondary effects on the transition tend to be stronger (Duru-Bellat 2002: 105-106; Duru-

the categories, because this book does not focus on differences in the educational behavior of different immigrant-groups.

Bellat, Jarousse and Mingat 1993; Duru-Bellat and Mingat 1988; 1989). Moreover, social class effects on the selection procedures could be different in ZEP-schools and private schools because teachers and headmasters have different interests than the school staff of common public schools (Van Zanten 2002). For instance, in private schools the staff may feel more obliged to act in the interests of the families because the families pay fees; in ZEP-schools teachers may actively try to reduce social inequality. Further, it has to be considered that parents who enroll their children in private schools have higher educational aspirations and are more involved (Caille 2004, Tavan 2004b).

As a fourth control variable I take into account the size of the city, town or village where the student goes to school. In large cities and Paris there are more “elite”- and private schools and hence families have more possibilities to influence their children’s school career through specific school choices (e.g. Ballion 1986; Brauns 1999; Brauns 1998). At the same time, *collèges* are more likely to be locally and historically attached to general upper secondary schools (*lycées*) and therefore students attending schools in cities are more likely to attend the general track. Moreover, students in rural areas are more likely to attend vocational upper secondary schools (and do apprenticeships) because in these areas more places are available in vocational schools and firms (e.g. Duru-Bellat 1996; Duru-Bellat, Jarousse and Mingat 1993). Since given this availability working class students are more likely to choose a vocational education, secondary effects are expected to be stronger in rural areas. Beyond that, the social class distribution is not the same in French urban and rural areas and people differ in terms of attitudes and resources. This causes higher rates of working class students in rural schools and since – as indicated above – secondary effects are stronger in schools with high rates of lower class students, secondary effects can be expected to be higher in rural areas. As shown by Roux and Davailon (2001), families from Paris and larger cities are more likely to request the general track than families that live in the countryside. To control for the urban-rural discrepancies I employ a variable with four categories: (1) rural to 5,000 inhabitants, (2) 5,000 to 20,000 inhabitants, (3) 20,000 to 200,000 inhabitants and (4) 200,000 to 2,000,000 inhabitants and Paris. Table 6 shows that 35 per cent of the students in the *basic sample* attend a school in Paris or another large city, more than one quarter attends a school in a city with 20,000 to 200,000 inhabitants and 18 to 20 per cent go to school in smaller towns and in the countryside.¹⁰³

¹⁰³ See also Moisan (2002) who shows that *académies* (see Subchapter 2.2.) differ with regard to rates of student transitions to vocational and general tracks.

7.3 Notes on the application of non-linear regression methods

As I generally use linear regressions and binary logistic regressions, which are well-established statistical methods, I refrain from giving an outline of the basics of these methods. As insightful and comprehensive explanations of the application of logistic regression (using Stata) I suggest for instance Wooldridge (2002), Long (1997) and Long and Freese (2006). Still, since recently more and more publications emphasize that the common interpretation of the results of non-linear regressions is problematic, I give here a very brief non-formal explanation of the discussed problems and present the solutions that I have settled for.

Problems with the interpretation of results of non-linear regressions come up (i) when the coefficients of nested regression models are compared, (ii) when the coefficients of regression models that are based on different samples are compared and (iii) when the coefficients of interaction terms are interpreted. On the one hand, the literature proposes solutions that solve specific problems. For instance, the so-called *KHB-method* enables a correct comparison of coefficients of nested logit and probit regression models that are based on the same sample (Karlson, Holm and Breen 2012; Karlson and Holm 2011; Kohler, Karlson and Holm 2011). On the other hand, there are solutions that hold for the comparison of coefficients of nested same-sample models *and* of models that are based on different samples: the calculation of average marginal effects (AME) and of predicted probabilities (Allison 1999; Auspurg and Hinz 2011; Best and Wolf 2010; Best and Wolf 2012; Mood 2010). Predicted probabilities moreover enable the detection and comprehensible interpretation of interaction effects in non-linear regressions (Best and Wolf 2010).

7.3.1 COMPARING REGRESSION COEFFICIENTS OF NON-LINEAR MODELS

Typically, to analyze to which extent the effect of X on Y is mediated by Z, one estimates the effect of X on Y in a first regression model and adds the mediator variable Z in a second regression model. Then, one compares the coefficients in the two models to see to which extent the effect of X on Y was reduced by the inclusion of Z. Applied to nonlinear probability models this method is problematic because the change of the coefficients can be due not only to the mediation or confounding but also to a *rescaling* of the model (Best and Wolf 2012; Karlson, Holm and Breen 2012; Karlson and Holm 2011; Kohler, Karlson and Holm 2011; Mood 2010).

To outline the rescaling problem one must consider the “latent variable model for binary variables” (Long 1997: 40-48). The model is based on the idea that there is a latent

unobserved continuous variable Y^* that generates the observed state of the binary dependent variable Y . In other words, whether the observed variable Y is “0” or “1” depends on the value of the latent variable Y^* . More specifically, this depends on whether the Y^* -value crosses a certain threshold. Not all researchers adopt the latent variable model. Some of them argue that its appropriateness depends on the theoretical problem that is analyzed. For the tests of rational choice theory it is regarded as appropriate (see e.g. Kroneberg, Heintze and Mehlkop 2010). Regarding the present analyses of families’ and teachers’ educational decision-making, Y^* represents a family’s or a staff meeting’s willingness to make a certain school track choice, e.g. LGT instead of LPA. Like the willingness, Y^* is continuous indicating for instance that some families or teachers who chose LPA were “closer” to opt for LGT than others. Y^* is assumed to be linearly related to the independent variables. However, as it is unobserved and its variance is unknown, no ordinary least square method can be applied and the maximum likelihood approach must be used.

Explained in elementary non-formal terms, the rescaling problem occurs because the latent variable Y^* is not known and hence the coefficients in the latent variable model cannot be calculated (for more detailed and formal explications see e.g. Best and Wolf 2012: 383-385; Best and Wolf 2010: 838; Karlson and Holm 2011: 224, 225; Kohler, Karlson, Holm 2011: 422, 423). To enable the calculation of regression parameters (or coefficients) in the latent model one parameter has to be fixed. As indicated before, this is the variance of the residual term. The residual variance is fixed to a constant value via a “scaling parameter” (Auspurg and Hinz 2011).¹⁰⁴ As the residual variance is fixed, the inclusion of an additional variable, e.g. the mediator Z , will always lead to an increase of the total variance of Y^* . This leads to a different scale and hence to differently scaled regression coefficients. Consequently, one cannot know whether the difference between the coefficient of X in the model including Z and the coefficient in the model without Z is due to mediation or to rescaling. The “reduced” model – i.e. the model without Z – has a larger scale parameter or larger error dispersion than the “full” model including Z (Winship and Mare 1984; Wooldridge 2002). The estimated logit coefficients are also affected by the rescaling because the term for the error dispersion is the denominator in the calculation of the coefficients (for a formal description of the problem see e.g. Karlson and Holm 2011: 232-233). The difference between the coefficients in the “reduced” and the “full” model is due to rescaling to the extent

¹⁰⁴ The value depends on whether a logit or a probit model is defined. In logit regressions, the distribution of the residuals is assumed to be logistic; in the probit regression, the residuals are assumed to be normally distributed. In logit models the residual variance is fixed to $\pi^2/3$ and in probit models it is fixed to 1.

that the “reduced” model has a larger residual standard deviation than the “full” model (Kohler, Karlson and Holm 2011: 423). Hence, whenever Z has an effect on Y^* that is independent of X , rescaling occurs.

Because of the rescaling problem coefficients can neither be compared over models that are based on different samples, even when they include exactly the same variables (Allison 1999; Auspurg and Hinz 2011). For instance, the coefficients of the same non-linear regression models calculated for different groups (e.g. men and women) or different time-points cannot be compared.

7.3.2 SOLUTIONS

Up to now, several solutions to the problem of the non-comparability of coefficients of logit and probit regression models have been put forward and evaluated. I present only those that I use for the analyses conducted in this thesis.¹⁰⁵ Thereby, I do again refrain from repeating detailed and formal descriptions that can be found in more elaborate statistical literature. I rather emphasize for which purposes the different solutions will be employed in the analyses in this dissertation.

Predicted probabilities and average marginal effects (AMEs)

It is generally acknowledged that the graphical presentation and interpretation of predicted probabilities provides reasonable and correct conclusions (for an introduction see e.g. Long 1997: 64-79; Long and Freese 2006: 163-177). Probabilities are understandable and they can be compared over nested same-sample models and models based on different samples (Best and Wolf 2010; Best and Wolf 2012). The difficulty with the use of predicted probabilities is that they depend on the values of the explanatory variables. Hence, one must decide for which specific “case” or combination of values of the explanatory variables the predicted probabilities shall be calculated. By means of *conditional effect plots*, i.e. the graphical presentation of predicted probabilities for different values of the explanatory variables, the results – at least of certain combinations of values of the explanatory variables – can be interpreted comprehensibly and vividly (e.g. Bauer 2010: 67, 68; Best and Wolf 2010; Long 1997).

¹⁰⁵ Aside from average marginal effects (AME) and the KHB-method, the literature discusses the employment of y^* -standardized coefficients, average partial effects, linear probability models and a recently advanced method by Breen, Karlson and Holm (2011) that intends to solve the problem of the non-comparability of coefficients obtained for *different samples*.

In the following analyses, I will present predicted probabilities in order to illustrate the magnitude of specific effects for specific cases. For instance, to illustrate social class effects on families' school track requests (with a regression that includes social class, immigration background and school type), I will calculate the predicted probability that a student of French origin from the upper service class, attending a public school that is not located in a ZEP demands the general track and the probability that a student who similar expect that he belongs to the working class requests the general track. Further, I will not only verbally compare such two predicted probabilities but graphically present calculated differences between them. This difference or change in predicted probabilities that occurs when a categorical independent variable changes from 0 to 1 is called a *discrete change effect* (e.g. Long 1997).

One coefficient that has been used for long in economics and that has become more and more popular among sociologists is the average marginal effect (AME). AMEs are comparable over nested same-sample models and over models based on different groups, time-points and other differing samples (Auspurg and Hinz 2011; Best and Wolf 2010; Best and Wolf 2012; Mood 2010: 582; Wooldridge 2002). To understand the interpretation of AMEs one should first think of the "marginal effect" or, in case of a categorical independent variable, the "discrete change effect". Again, for a categorical explanatory variable this effect is the difference in $P(Y=1)$ between a person for whom the explanatory variable is 1 and the exact same person (i.e. the values of all other variables are held constant at the same values) for whom the explanatory variable equals 0. If the explanatory variable is continuous, we speak of a "marginal effect". This is the difference in $P(Y=1)$ for a case with a certain value on the explanatory variable and for a corresponding case (all other explanatory variables are held constant at the same values) with a value on the explanatory variable that corresponds to a one-unit increase of the starting value (Long 1997). For example, in a regression model that includes only mark and social class as explanatory variables, a marginal effect would correspond to the difference in $P(Y=1)$ for a student from the higher salariat who has a mark of 5 and another student from the higher salariat with a mark of 6. Obviously, because of the non-linear relation between the explanatory variable and the probability, the marginal effect varies over the level of the continuous explanatory variable. Computing the marginal effect for similar students with marks 12 and 13 would yield different results.

The AME, then, is the average of the marginal effect or discrete change effect over all observations and hence over all observed combinations of values of the other variables.

Williams (2012) vividly describes the AME of a categorical variable (black vs. white) as follows:

“Go to the first case. Treat the person as though s/he were white regardless of what the person’s race actually is. Leave all other independent values as is. Compute the probability (if he or she were white) would have diabetes [the binary dependent variable]. Now do the same thing, this time repeating the person as though they were black. The difference in the probabilities just computed is the marginal effect for that case. Repeat the process for every case in the sample. Compute the average of all the marginal effects you have computed” (Williams 2012: 325).

One disadvantage of the AME is that it does not take into account the non-linear relationship between the explanatory variable and the probability. As it simply is an *average* effect, it does not tell the whole story. At the same time, it provides a *single* number for the effect of a variable that was computed using all of the observations. According to some researchers, another advantage is that the AME is “intuitively” interpretable (Best and Wolf 2010; Best and Wolf 2012). At least for a categorical value, one can easily imagine what an AME represents.

Throughout the analyses of this dissertation I will present AMEs as they are comparable over same-sample nested models and models for different samples. This enables the reader to see how coefficients change when confounding variables are taken into account. Moreover, it enables to compare coefficients based on different samples. Additionally, I will sometimes show logit coefficients. Although these are not easily interpretable and cannot be compared over models, I present them in order to document the regression coefficients that were used to compute presented predicted probabilities. To compute and graph AMEs, predicted probabilities and discrete change effects, I use the “margins”- and “marginsplot”-command implemented in Stata 11.

The KHB-method

Recently, Karlson, Breen and Holm (2012) advanced a method that solves the problem of non-comparability of coefficients of *nested same-sample* models. Summarized in few terms, the “KHB-method” calculates relative effects that are not affected by rescaling because they use ratios in their calculation of the regression coefficients that cancel out the scaling parameter. They calculate the residuals of an OLS-regression of X on the confounding variable Z and include these residuals as an additional explanatory variable in the “reduced” logit or probit model, which is the model that does not contain the confounding variable Z (Best and Wolf 2012: 388). The explained variances of the two compared latent variable

models are identical and the scaling parameters correspond. Consequently, the log odds-ratios (or logits) can be computed net of rescaling.¹⁰⁶

The method, or rather its Stata-implementation (Kohler, Karlson and Holm 2011), decomposes the total effect of X on into a *direct* and an *indirect effect* measured on the same scale. The effects are measured in logits, but log odds-ratios and AMEs can be computed, too. The *direct effect* is the part of the total effect that remains after controlling for Z and the *indirect effect* is the part of the total effect that is mediated by Z. For instance, if one analyzes the effect of social class and school performance on families' school track choices, the *direct effect* corresponds to the secondary effects and the *indirect effect* represents the primary effects (see Karlson and Holm 2011; Boudon 1974). Similarly, the decomposition can be applied to all other research questions that seek to quantify the extent to which a confounding variable explains the relationship between a continuous or categorical independent variable and a categorical dependent variable.

Several Monte Carlo simulations evaluate the performance of AMEs, the KHB-method and other proposed solutions such as y*-standardization and linear probability models (Best and Wolf 2012; Karlson, Holm and Breen 2012; Karlson and Holm 2011). While AMEs and the KHB-method provide very robust results, the other approaches perform weakly when the explanatory variables are not normally distributed and do not correlate. Comparing the AMEs and the KHB-method, the coefficients obtained with KHB were found to be entirely unaffected by heavily skewed distributions of the explanatory variables while the AMEs are slightly biased. Yet, the AMEs are valued as a satisfying solution of the problem of non-comparability of same-sample nested models (Best and Wolf 2012: 391) and, beyond that, they are comparable over different samples.

In the following analyses I will apply the KHB-method when I compare nested same-sample logit models and want to provide an exact quantification of a direct and indirect effect. In order to document the absolute size of *every* AME-coefficient in the model (including the confounding and the control variables), I moreover show AMEs for each variable in each distinct nested model. These AMEs are not obtained with the Stata-command "margins". Presenting AMEs calculated with the "margins"-command and AMEs obtained from the KHB-model serves also as sensitivity analysis.

¹⁰⁶ Aside from Karlson, Holm and Breen (2012), see Karlson and Holm (2011) and Kohler, Karlson and Holm (2011) for other comprehensive explanations of the method.

7.3.3 INTERACTIONS IN NON-LINEAR REGRESSION MODELS

Due to the non-additive association between the explanatory variables and the probability in non-linear models, logit and probit models already contain “interaction effects”. In other words, the non-additivity means that the effect of an explanatory variable on the probability always depends on the values of the other explanatory variables that are included in the model. This makes the regression less sensitive to the direct specification of interaction terms (Best and Wolf 2010: 840). According to Ai and Norton (2003; Norton, Wang and Ai 2004), the common specification yields four important implications for non-linear models: First, the coefficient in the model could indicate that there is no interaction effect, although there is one. Second, the t-test is no appropriate approach to test the significance of the interaction effect and hence the computed model may yield incorrect results regarding the significance of the interaction effect. Third, one has to consider that the effect depends on the values of all other explanatory variables and that consequently the interaction effect can hold only for certain combinations of values of the explanatory variables. Fourth, the coefficient in the model may indicate a sign that holds only for certain (combinations of) values of independent variables and not for all or for others. For instance, for certain cases the interaction effect may be positive and for others it may be negative.

The use of conditional effect plots, i.e. graphical presentations of predicted probabilities, provides a remedy (e.g. Bauer 2010; Best and Wolf 2010; Long and Freese 2006: 436-438). Therefore, when examining interaction effects, I will plot predicted probabilities respectively discrete change effects for various combinations of values of the explanatory variables. I will not do so however for every considered interaction term but only for those that increase the model fit (i.e. the explanatory power) of the respective regression model (see Best and Wolf 2010). Since the AME is no solution for a correct analysis of interaction effects in non-linear models, I present logits to document the regression coefficients on which the predicted probabilities are calculated.

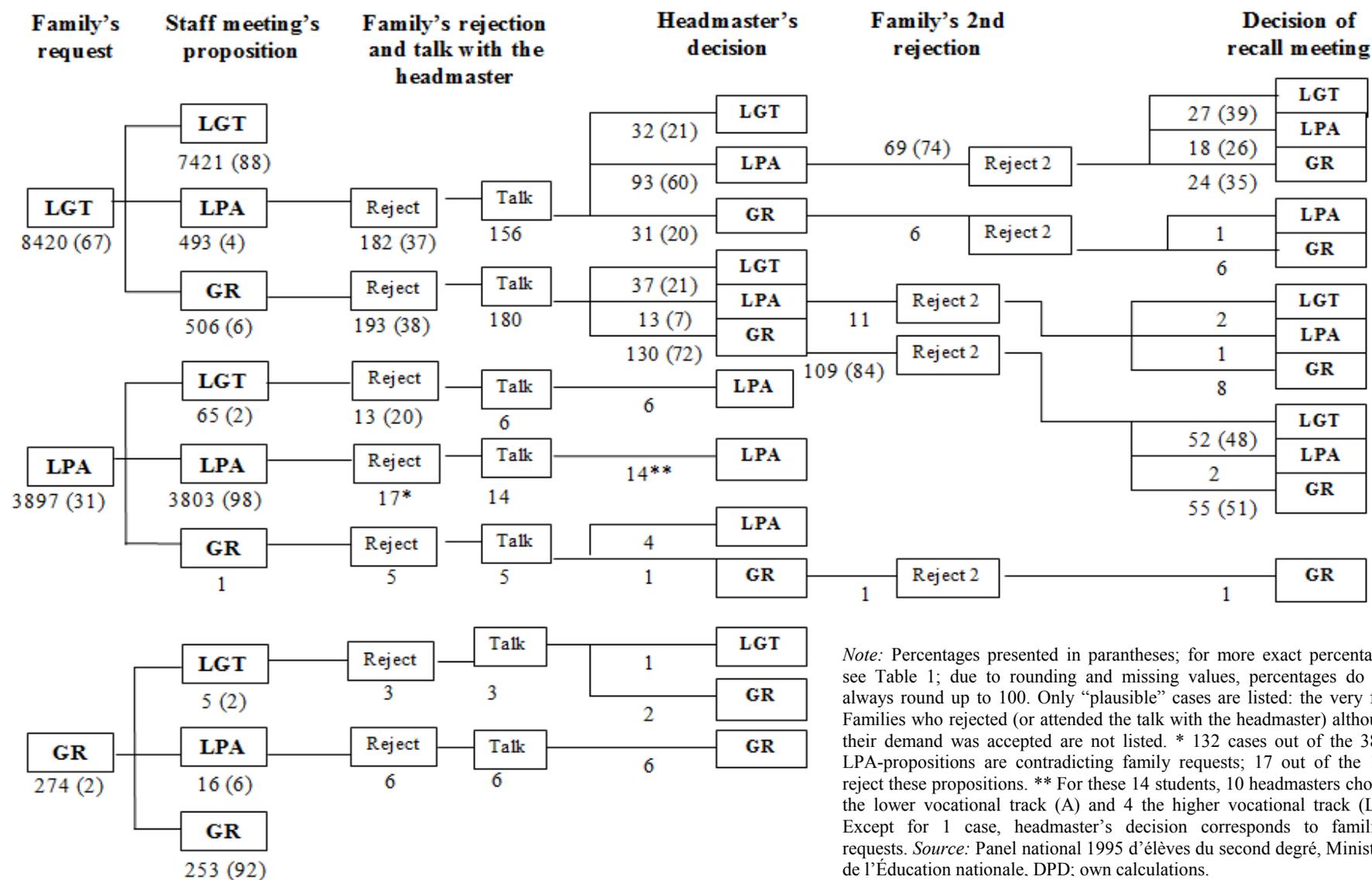
8 Results

To give a first idea of families' and school staffs' interdependent decision-making within the dialogue, Figure 3 presents different pathways through the dialogue. In most cases the staff meeting accepts a family's school track request. However, the extent of acceptance slightly varies: While only 88 per cent of LGT-demands are accepted, 98 per cent of families who requested the higher vocational track or the lower vocational track (LPA) and 92 per cent of those who requested grade retention (GR) receive a corresponding proposition. Only 2 per cent of the families who requested a vocational track are proposed the general track (LGT).

Among families whose demands were not accepted, those who requested the general track are more willing to take the trouble to reject and attend the talk with the headmaster than families who made more modest school track requests. While around 37 per cent of families who demanded LGT but were proposed a vocational track or GR decide to reject, only 17 per cent of families who requested LP or A and were proposed a different vocational track (132 cases) do so. Among the 65 families whose request was LPA but who received an LGT-proposition 13 families (i.e. 20 per cent) reject. If a family requested LGT, headmasters' decisions are most likely to correspond to staff meetings' propositions (60 per cent if the staff meeting proposed LPA and 72 per cent if it proposed GR). If a family opted for the vocational tracks or grade repetition, the headmasters are more likely to accept the request: For instance, if a family demanded GR but was proposed LPA by the staff meeting, the headmaster accepts all of the GR-demands. However, overall the frequencies are small. This seems to indicate that the school is stricter regarding the admission to the general secondary school track than regarding admission to the lower tracks and that the headmaster is willing to accept GR even if it increases grade retention rates.

Furthermore, most of the families who have rejected but did not achieve a decision of the headmaster that corresponds to their request decide to reject a second time. However, overall less than 2 per cent of the families in the sample actually do that. Grade repetition appears to play a special role: The staff meetings propose it slightly more often than LPA to families who have requested LGT, and the headmasters choose this option very often, too. Similarly, the recall meeting decides grade retention for many of the families who have rejected a second time. These frequencies provide a preliminary support of the assumption that the school staff and the families handle grade retention as a *compromise*.

Figure 3 Students' traversing of the dialogue: frequencies and shares (basic sample, N=12 591)



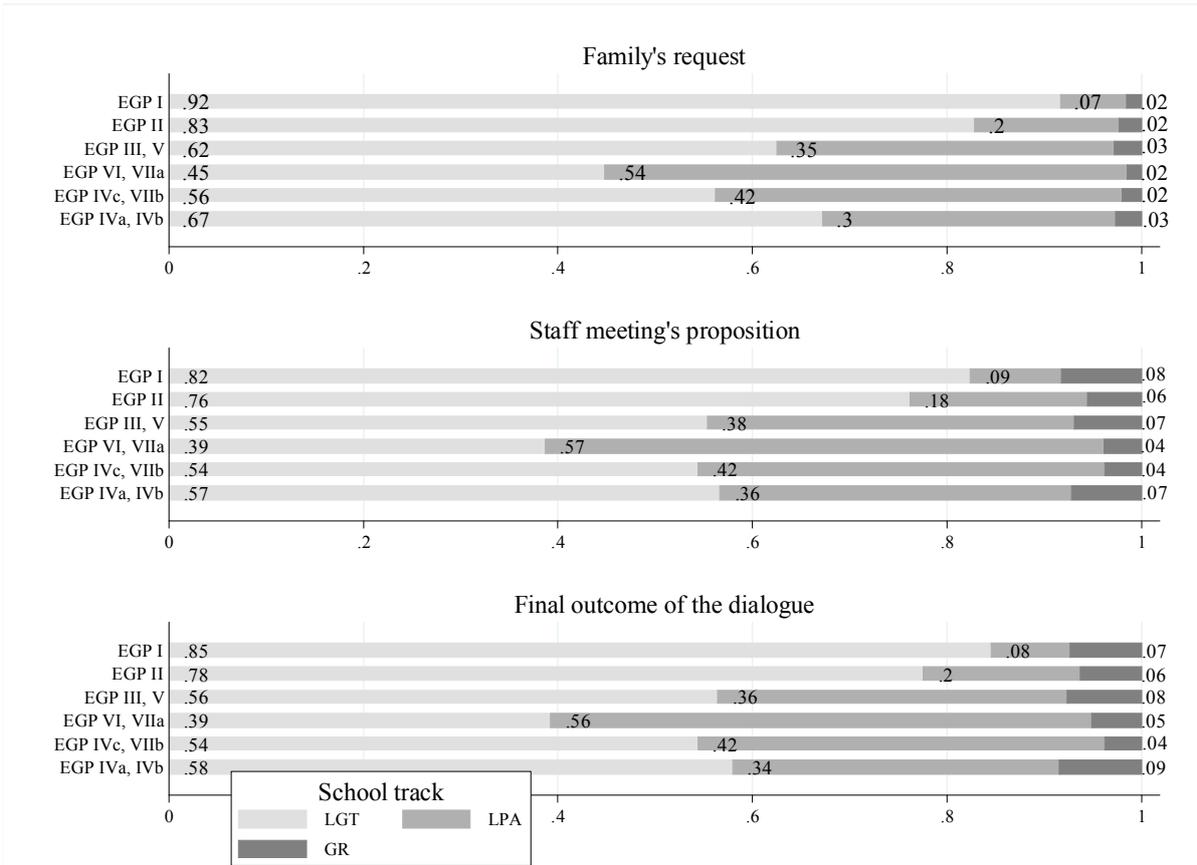
Subchapter 8.1 addresses social class differentials in families' school track requests, staff meetings' school track propositions and final outcomes of the dialogue. It focuses on families' and school staffs' choice between the general track (LGT) and the vocational track (LPA). Subchapter 8.2 will present tests of the *general* "bridging hypotheses", i.e. assumptions that link the social situation an actor is in with her subjective evaluation of this situation. These include the association between social class and school performance or between social class and the different types of involvement. I label them *general* bridging hypotheses because they hold for families' *and* school staffs' choices along the dialogue. Subchapter 8.3 will outline the test of the theoretical model on family's decision-making. At the beginning of this subchapter, I test *specific* bridging hypotheses on social class differences in families' decision-making parameters (e.g. *educational motivation, c*SD*). Subsequently, I present tests of the theoretical model on families' school track request and rejection decisions. Again, the analysis of families' requests focuses on their decision between LGT and LPA. In Subchapter 8.4, I investigate staff meetings', headmasters' and recall meetings' decision-making. As for families' requests, I analyze staff meetings' choice between LGT and LPA. Finally, Subchapter 8.5 deals with families' and school staffs' grade retention decisions and, to complete the picture, the last sections bring into line families' and school staffs' decisions between LGT, LPA *and* grade retention (GR).

8.1 Social class differentials within the dialogue

I begin with some descriptive results. Figure 4 presents absolute chances of opting for the general track, the vocational track or grade repetition by family's social class. As expected, the chances of requesting, getting proposed and finally getting access to LGT augment with a family's social class position. Among families belonging to EGP I, 92 per cent demanded the general track, 83 per cent of those belonging to EGP II did so, 62 per cent of those from EGP III and V and 45 per cent of EGP VI- and VIIa-families demanded LGT. As suggested in the literature, the class consisting of farmers and agricultural workers (EGP IVc, VIIb) and the class containing the petty bourgeoisie and the self-employed (EGP IVa, IVb) are considered outside the hierarchical order. Among the families from EGP IVa and IVb, 67 per cent requested the general track and among those from EGP IVc and VIIb 56 per cent did so. The relationship between staff meeting's school track proposition and family's social class highly resembles the corresponding association between family's social class and its school track request. Though, generally chances that the staff meeting proposes LGT are lower than the probabilities that a family requests the general track.

Regarding the final outcome of the dialogue, the respective general chances of getting access to LGT lie in-between: For example, while 92 per cent of families from EGP I request LGT, staff meetings propose LGT to only 82 per cent of them and 85 per cent of these families finally attain access to LGT. For families in EGP-class II, EGP-class III and V and the class of self-employed and petty bourgeoisie (EGP IVa, IVb) the percentages act by the same pattern. In contrast, for the working class (EGP VI, VIIa) and the class of farmers and agricultural workers (EGP IVc, VIIb), the final outcomes of the dialogue correspond to the staff meeting's proposition, at least regarding LGT. Generally, it seems that not much 'happens' between a staff meeting's proposition and the ending of the dialogue. There seem to be few rejections, or if there are rejections, the school staff seems to often hold on to its decisions.

Figure 4 Social class differentials in family's school track request, staff meeting's school track proposition and the final outcome of the dialogue (absolute chances; basic sample)



Note: LGT=general track, LPA=vocational track, GR=grade repetition; due to rounding the absolute chances not always sum up to 1. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

The following figures present predicted probabilities that correspond to the secondary effects. They are based on regressions of families' school track requests, staff meetings'

propositions and the final outcomes on families' social class and school performance of the student. The regression models contain also the control variables. They focus on the decision between the general track (LGT) and the vocational track (LPA). The calculated predicted probabilities – obtained from the regression models presented in Table A3 in the appendix – represent students of French origin enrolled in public secondary schools that are not located in a ZEP. Moreover, the city size-variable is held constant at “200,000 to 2,000,000 inhabitants and Paris” and the variable indicating whether a student has repeated grades in lower secondary school is held constant at “0”.¹⁰⁷ To illustrate how the social class effects on the three steps of the dialogue (i.e. family's request, staff meeting's proposition and the final outcome) vary by school performance level, the probabilities are calculated for every social class and for every mark. I additionally present discrete change effects that correspond to the difference between the predicted probability for each class and the predicted probability for the reference class (working class, or EGP VI, VIIa).

The left column of Figure 5 lists graphs that present probabilities. The right column lists graphs that show the corresponding discrete change effects. The main purpose of Figure 5 is to illustrate how the extent of social class differentials varies by students' performance level. As expected, predicted likelihoods of requesting LGT, of being proposed LGT and of finally gaining access to LGT generally increase with a student's marks. For example, while a family from EGP I whose child has a mark of 5 has a likelihood of 0.5 to request the general track, a family from the same class whose child has a mark of 6 has a probability of more than 0.6 to request LGT. With regard to staff meetings' propositions, the corresponding probabilities are considerably lower but they increase with students' marks, too.

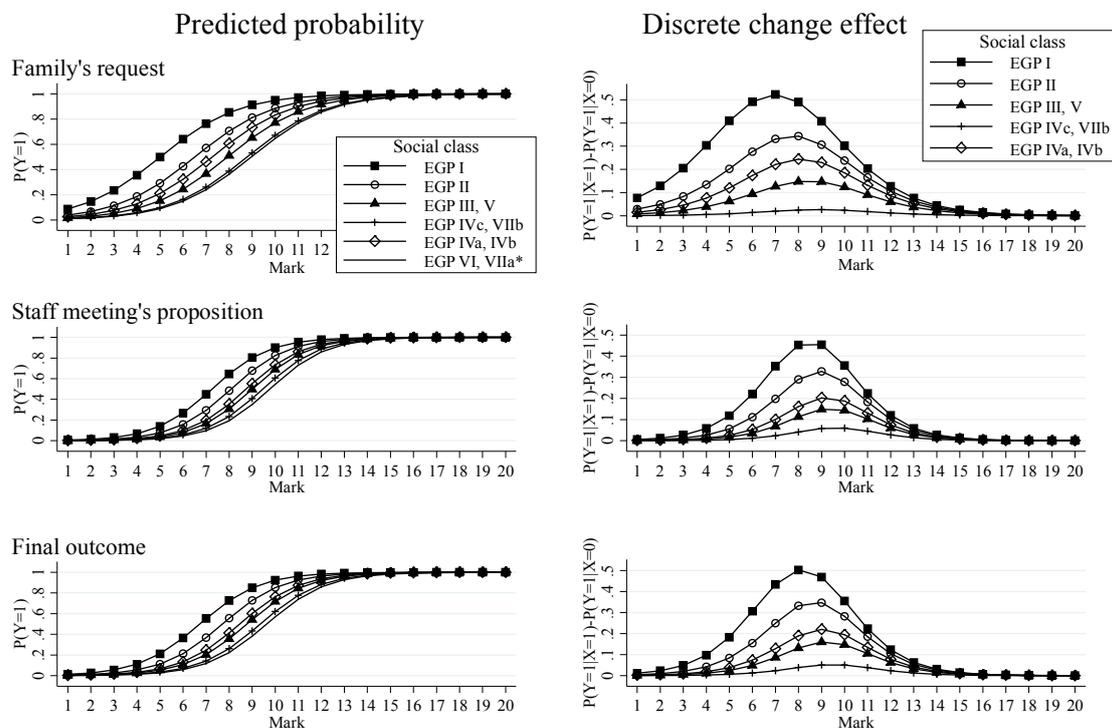
The discrete change effects reveal that differences between social classes emerge in the lower and middle range of students' performance. For instance, given a child has an average mark of 7, the probability that an EGP I-family demands the general track (instead of the vocational track) is 50 percentage-points higher than the corresponding predicted likelihood that a family from the working class, i.e. the reference category, makes that choice. In the same fashion, the probability that an EGP II-family requests LGT is around 33 percentage-points higher and that of a family belonging to EGP III or EGP V is 15 points higher.¹⁰⁸ Given a student has a mark that is better than 16, there are no social class differentials, neither in

¹⁰⁷ Predicted probabilities presented in the following will typically hold for students with these characteristics. If additional variables are specified, I will indicate so in the text or in figures' footnotes.

¹⁰⁸ A presentation of confidence intervals would indicate whether the discrete change effects are significant. However, to keep the figure as clear as possible I have refrained from showing the intervals. The significance levels of the social class effect are listed in Table A3 in the appendix.

families' requests nor in the staff meetings' propositions or the final outcome of the dialogue. By contrast, if a student has rather low marks (e.g. a mark of 2), clear social class differences in families' demands appear but none in staff meetings' decisions. This indicates that staff meetings "correct" too ambitious requests of higher-class families with poorly performing children. As social class differences in the final outcome are slightly more pronounced, we can expect that small social class differences emerge through the steps between the staff meeting's decision and the final outcome, i.e. families' rejections and headmasters' or recall meetings' decisions.

Figure 5 Social class effects on family's school track request, staff meeting's school track proposition and the final outcome of the dialogue by mark (predicted probabilities and discrete change effects; LGT vs. LPA)



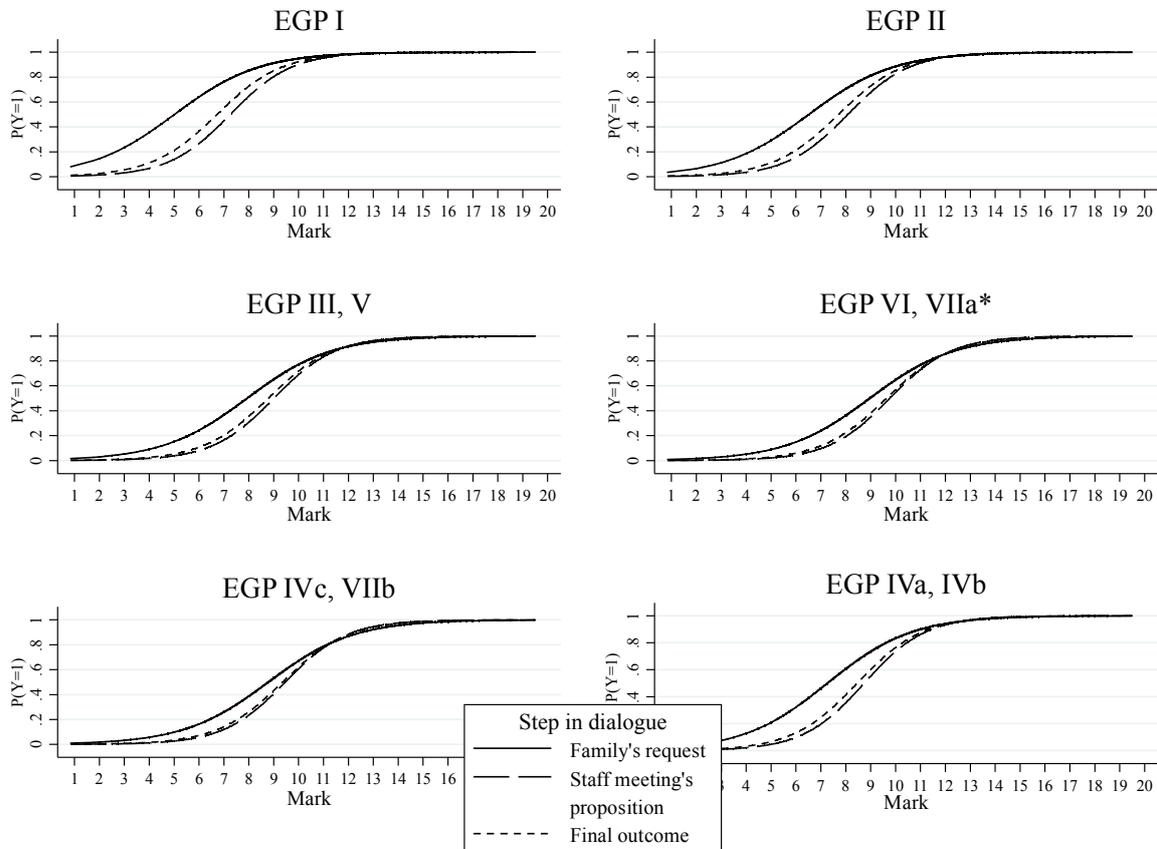
Note: LGT= general track, LPA=vocational track; *reference category in the regression models; estimates obtained from regression models presented in Table A3; probabilities were calculated for French students who have not repeated grades, who are enrolled in public non-ZEP schools located in a city with at least 200,000 inhabitants. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Figure 6 and Figure 7 contain the exact same probabilities and corresponding discrete change effects but present them differently in order to illustrate the difference between families' requests, staff meetings' propositions and the final outcomes. Figure 6 clarifies that for all classes and at almost all performance levels the probability that a family requests LGT

(instead of LPA) is higher than the probability that the staff meeting proposes LGT. The likelihood that the final outcome of the dialogue is LGT slightly exceeds the likelihood that the staff meeting proposes LGT. The distances between the curves increase with family's social class position. For instance, while the probability that an EGP I-family with a child whose mark is 7 requests LGT is nearly 0.8, the corresponding predicted probability that the staff meeting proposes LGT is only 0.4 and the respective probability that the final outcome is LGT is 0.5. Comparatively, for EGP II the corresponding probabilities are 0.6 (family's request), 0.3 (staff meeting's proposition) and 0.4 (final outcome), or for the reference class EGP VI and VIIa they are 0.2 (family's request), 0.1 (staff meeting's proposition) and somewhat higher than 0.1 (final outcome). Again, if students have good marks, e.g. at least 16, the family and the staff meeting agree on LGT and consequently the final outcome is LGT. If a student has a mark in the middle range, the distance between the probabilities for families' requests and staff meetings' propositions is the greatest, in particular for higher social classes. If a student has very low marks, one can see distances between the curves only in the graphs for the higher social classes.¹⁰⁹

¹⁰⁹ Lowess smoothers reveal that the larger distance between the curves in the middle-ranges is not due to the logistic function.

Figure 6 Predicted probability that family's request, staff meeting's proposition and final outcome of the dialogue are LGT instead of LPA by mark and social class

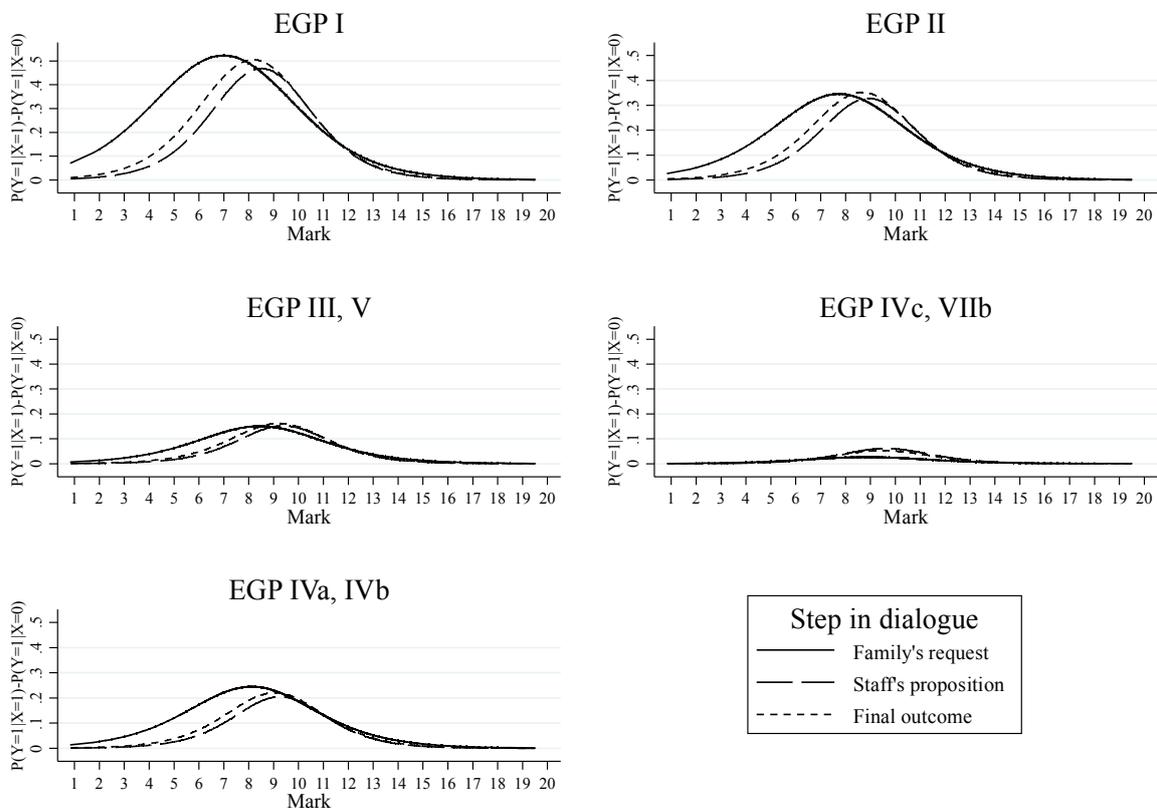


Note: LGT= general track, LPA=vocational track; *reference category in the regression models; estimates obtained from models presented in Table A3; probabilities were calculated for French students who have not repeated grades, who are enrolled in public non-ZEP schools located in a city with at least 200,000 inhabitants. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Again, the presentation of the discrete change effects in Figure 7 shall make the social class effects even clearer. The bumps of the curves indicate the maximal differences between the predicted probabilities for each class and the corresponding predicted probability for the reference category (i.e. the working class). The solid curve representing family's request shows: the higher the EGP-class, the bigger are the bumps. Moreover, for higher social classes the bump is located more left on the x-axis. Hence, families from higher social classes are generally more likely to demand LGT and they are more likely to do so even though the child has relatively low marks. The bumps in the curves representing staff meetings' propositions (i.e. curves with long dashes) increase with social class, too. This indicates that the school is highly influenced by families' requests and therefore *reproduces* the size of the social class differentials. However, the maximum of the curves representing staff meetings' propositions lie around 9 for all social classes. Hence, when families request the general track (LGT) although their child is poorly performing, the staff meeting disagrees with families,

regardless of their social class. In respect to the final outcome of the dialogue, social class differences resemble more those in families' requests: especially for EGP I the maximum of the curve that represents the final outcome is somewhat more left than that of the curve representing the staff meetings' decisions. Again, we can infer that some higher classes manage to get their way via the steps of the dialogue that lie between the school's proposition and the final outcome. These steps are families' rejections, and headmasters' and recall meetings' decisions.

Figure 7 Discrete change effects of social class on family's school track request, staff meeting's school track proposition and the final outcome of the dialogue by mark (discrete change effect; LGT vs. LPA)



Note: LGT= general track, LPA=vocational track; discrete change corresponds to difference in probabilities of choosing LGT (instead of LPA) between each social class and the reference class (EGP VI, VIIa); estimates obtained from models presented in Table A3; probabilities were calculated for French students who have not repeated grades, who are enrolled in public non-ZEP schools located in a city with at least 200,000 inhabitants. *Source:* Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

To shed light on the relative extent of primary and secondary effects on the two first steps of the dialogue and its ending, I apply the Karlson Holm Breen (KHB) method. This technique decomposes the total effect of social class on family's request, staff meeting's proposition and the final outcome of the dialogue into a *direct* and an *indirect effect* measured

on the same scale. The *direct effect* is the part of the total social class effect that remains after controlling for school performance; the *indirect effect* is the part of the total effect that is mediated by school performance. Hence, the *direct effect* represents the secondary effects and the *indirect effect* corresponds to the primary effects (Karlson and Holm 2011).

Table 7 shows to which extent the effect of each social class (as compared to the reference class EGP VI and VIIa) is due to the primary and the secondary effects. The table also lists corresponding AMEs. The row labeled “Total effect” indicates the AMEs of the classes in the “reduced model”, i.e. the model only including social class and the control variables. The coefficient has been adjusted with the KHB-method so as to not be affected by rescaling (see Subchapter 7.3). The row that is labeled “Direct effect” shows the AMEs of social class that remain after controlling for mark and grade repetition. These are the coefficients of the so-called “full model”. The line labeled “Indirect effect” lists the differences between the “total AMEs” and the “direct AMEs”. Finally, the “confounding percentage” indicates how much of each class effect is mediated by school performance and hence it quantifies the primary effects’ relative size.

Comparing the confounding percentages for family’s request, staff meeting’s proposition and the final outcome, one notes that secondary effects on families’ requests are stronger than on staff meetings’ decisions and final outcomes. Except for the class of farmers and agricultural workers and that of self-employed and the petty bourgeoisie, social class differentials in families’ LGT-requests are less mediated by student performance than social class differentials in staff meetings’ respective decisions. For instance, while 41 per cent of the *total EGP I-effect* on family’s request are due to performance differences between EGP I-students and working-class students (i.e. the reference category), almost 54 per cent of the EGP I- effect on staff meeting’s decision is caused by the respective primary effects. Regarding EGP II and EGP III and V, the primary effects are considerably larger. This result is in accordance with the theory: Since for families from the highest class it is more important to have their children attend the general track, they are more likely to demand it even when their children have not too good marks. Staff meetings’ decisions follow the same pattern but magnitudes of the primary and secondary effects do not vary as much by social classes. The pattern corresponds because staff meetings take into account families’ requests; the differences however are slightly weaker because the staff is not willing to accept demands that are too ambitious.

With regard to the final outcome of the dialogue, Table 7 reveals that for most of the classes the secondary effects exceed those on the staff meetings' propositions. This indicates that secondary effects slightly increase because of families' rejections, and headmasters' and recall meetings' decisions. Beyond that, the difference of secondary effects on staff meetings' propositions and the final outcomes is slightly greater for EGP I-families than for EGP II- or EGP III and V-families. This finding implies that higher classes are more likely to get their will through their rejections, headmasters' decisions or recall meetings' decisions.

Moreover, it is interesting to note that the primary effects are very large on all three decisions for the class of farmers and agricultural workers. This indicates that sending their child to the general track is not very important to them – they seem to do so only when the child has very good marks. This is the only class for which the staff meetings' decisions are more affected by secondary effects than the families' demands: almost 90 per cent of families' choices and 84 per cent of staff meetings' decisions are due to students' school performance. Finally, the decisions of the families belonging to the class of self-employed and petty bourgeoisie are even more affected by secondary effects than requests of EGP I-families. They seem to assign a lot of importance to sending their children to LGT.

Table 7 *Decomposing social class effects on family’s request, staff meeting’s proposition and the final outcome in direct effects and indirect effects via student performance; AMEs.*

Decomposing social class (Ref. EGPVI, VIIa)	EGPI	EGPII	EGPIII, V	EGPIVc, VIIb	EGPIVa, IVb
<i>Family’s request (LGT vs. LPA)</i>					
Total effect	0.451***	0.370***	0.182***	0.149***	0.227***
Direct effect (i.e. secondary effect)	0.266***	0.184***	0.084***	0.015	0.134***
Indirect effect (i.e. primary effect)	0.184	0.186	0.099	0.134	0.094
Confounding percentage	40.89	50.21	54.15	89.89	41.27
N	11576				
<i>Staff meeting’s proposition (LGT vs. LPA)</i>					
Total effect	0.467***	0.380***	0.188***	0.183***	0.204***
Direct effect (i.e. secondary effect)	0.216***	0.153***	0.072***	0.029	0.096***
Indirect effect (i.e. primary effect)	0.251	0.227	0.116	0.154	0.108
Confounding percentage	53.72	59.84	61.69	84.08	52.77
N	11071				
<i>Final outcome (LGT vs. LPA)</i>					
Total effect	0.473***	0.390***	0.195***	0.178***	0.217***
Direct effect (i.e. secondary effect)	0.236***	0.167***	0.078***	0.026	0.106***
Indirect effect (i.e. primary effect)	0.237	0.223	0.117	0.152	0.111
Confounding percentage	50.09	57.22	59.81	85.43	51.06
N	10999				

Note: AME=average marginal effect, LGT= general track, LPA=vocational track; estimates obtained with Stata-command “khh” (Kohler, Karlson and Holm 2011); concomitant variables are French origin, school types and city size. Standard errors are adjusted for school-level clustering. Source: Panel national 1995 d’élèves du second degré, Ministère de l’Éducation nationale, DPD; own calculations.

To complete the picture of the social class differentials along the dialogue, Table 8 presents the results of *nested binary logistic regressions* of the final outcome of the dialogue (LGT vs. LPA) on social class, marks, family’s request, staff meeting’s proposition and family’s rejection decisions.¹¹⁰ Model 1 shows that, holding constant students’ marks, the likelihood that a higher service class family gets access to the general track is, on average, 26 percentage points higher than the corresponding likelihood for a working class family

¹¹⁰ Regression models are *nested* if they have the same dependent and explanatory variable and one model contains at least one additional explanatory variable.

($p < 0.001$). Among families from the lower service class (EGP II), the average likelihood difference is 19 percentage points ($p < 0.001$). Families from EGP III and V have an average likelihood advantage of 8 percentage points and families belonging to the class of self-employed and petty bourgeoisie have one of almost 12 percentage points. The AME for the class of farmers and agricultural workers is significant only at a minor level.

Unsurprisingly, including families' school track requests boosts the model fit and dramatically decreases the social class effects (Model 2). Still, the AME of EGP I is highly significant and has a size of almost 0.03 AME-points. The AME of EGP II is almost 0.02 points of size and significant at the intermediate level ($p < 0.01$). Model 3 takes into account the staff meetings' propositions. The model fit further strongly increases and the social class effects decrease. The effect of EGP I remains significant at the intermediate level ($p < 0.01$); the effect of EGP II has the same size as that of EGP I but remains significant only at a minor level ($p < 0.05$). This result clearly indicates that the steps between the staff meetings' propositions and the ending of the dialogue contribute to the secondary effects. Indeed, as families' rejection decision is included, the remaining effects of EGP I and II become insignificant. The variable for families rejection decision distinguishes three categories: families who were entitled to reject (i.e. families of whom the staff meeting did not accept the request) but did not reject, families who did reject and families who were not entitled to do so because the staff meeting had accepted their request. Families who have rejected and families who were not entitled to reject are more likely to finally get access to the general track than families who could have rejected but did not. As the effects of EGP I and II become insignificant, I conclude that no step past families' rejections of staff meetings' propositions contributes to the secondary effects on the final outcome, i.e. students' ultimate transition to LGT.

Table 8 Social class effects on final outcome (results of binary logistic regressions; AMEs)

	Model 1 AME (SE)	Model 2 AME (SE)	Model 3 AME (SE)	Model 4 AME (SE)
<i>Social class</i> (Ref. EGP VI, VIIa)				
EGP I	0.257*** (0.01)	0.025*** (0.01)	0.009** (0.00)	0.006 (0.00)
EGP II	0.187*** (0.01)	0.016** (0.01)	0.009* (0.00)	0.004 (0.00)
EGP III, V	0.082*** (0.01)	0.009 (0.00)	0.002 (0.00)	0.001 (0.00)
EGP IVc, VIIb	0.046* (0.02)	0.021* (0.01)	0.002 (0.01)	0.004 (0.01)
EGP IVa, IVb	0.117*** (0.01)	0.003 (0.01)	0.001 (0.00)	0.000 (0.00)
French origin	-0.053*** (0.01)	-0.001 (0.00)	-0.002 (0.00)	-0.001 (0.00)
Private school	-0.075*** (0.01)	-0.026*** (0.00)	-0.004 (0.00)	-0.005* (0.00)
ZEP-school	-0.014 (0.01)	-0.006 (0.01)	-0.002 (0.00)	-0.003 (0.00)
<i>City size</i> (Ref. >200,000 inh., Paris)				
< 5,000 inh.	-0.087*** (0.01)	-0.005 (0.01)	-0.002 (0.00)	-0.003 (0.00)
5,000-20,000 inh.	-0.069*** (0.01)	-0.001 (0.00)	0.001 (0.00)	0.001 (0.00)
20,000-200,000 inh.	-0.025** (0.01)	0.005 (0.00)	0.001 (0.00)	-0.001 (0.00)
Mark	0.095*** (0.00)	0.021*** (0.00)	0.003*** (0.00)	0.003*** (0.00)
<i>Family's request</i> (Ref. LGT)				
LPA		-0.779*** (0.01)	-0.230*** (0.03)	-0.178*** (0.02)
GR		-0.262** (0.11)	-0.073*** (0.01)	-0.059** (0.02)
<i>Staff meeting's proposition</i> (Ref. LGT)				
LPA			-0.506*** (0.04)	-0.494*** (0.05)
GR			-0.151*** (0.02)	-0.215*** (0.03)
<i>Family's rejection</i> (Ref. Entitled but did not reject)				
Not entitled to reject				0.013*** (0.00)
Rejected				0.027*** (0.00)
<i>N</i>	10999	10999	10999	10999
<i>AIC</i>	7967.3	2284.3	831.6	733.4

Note: AME=average marginal effect, SE=standard error adjusted for school-level clustering, LGT=general track, LPA=vocational track, GR=grade retention. * p<0.05; ** p<0.01; ***p<0.001. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

In sum, this first general presentation of social class effects on step one (family's request), step two (staff meeting's proposition) and the dialogue's final outcome provide three main insights: First, as shown in previous studies, social class effects, notably the secondary

effects, are greater on families' choices than on staff meetings' decisions. However, the "patterns" are very similar indicating that the staffs' propositions are strongly affected by families' requests. Second, as expected, social class effects are the greatest when a student's school performance is in the lower and middle range. Though, when a student has very low marks, the staff meeting seems less willing to accept ambitious requests by the families. Third, the secondary effects on the dialogue's final outcome slightly exceed the secondary effects on the staff meeting's proposition, at least for the higher social classes. This indicates that some families manage to carry through their requests. Indeed, as nested regressions of the final outcome reveal, social class differences in families' rejection decision explain the little remaining effect. The following subchapters aim to shed light on the mechanisms that generate the social class effects on families' and school staffs' decisions along the dialogue. Thereby, most attention is addressed to the mechanisms that shape the first most important steps of the dialogue: families' school track requests and staff meetings' propositions.

8.2 General “bridging hypotheses”

In the present subchapter, I analyze associations between social class and central mediating variables. More specifically, the aim of this analysis is to test the general bridging hypotheses on social class differentials in school performance (i.e. the primary effects) and parental involvement. These assumptions are the theoretically expected mechanisms that link families’ social class to families’ and school staffs’ decision-making.

8.2.1 SOCIAL CLASS DIFFERENTIALS IN SCHOOL PERFORMANCE

Table 9 presents results of nested linear regression models of marks in the *brevet* on social class, the control variables, parental education and grade repetition in lower secondary school. This analysis reveals that there are important social class differentials in student’s performance in the *brevet*. Moreover, it shows how the social class effects are related to immigration background, school type, city size (Model 2), parental education (Model 3) and the other school performance measure grade repetition (Model 4).¹¹¹ Model 1 indicates that, on average, EGP I-students have marks that are 2.3 points higher than working class students (EGP VI, VIIa). For EGP II-students the difference is 1.94 points and for students belonging to EGP III and V it is 0.87. Students from the class of farmers and agricultural workers show a relatively high performance level while children of self-employed and the petty bourgeoisie perform worse.

Including the control variables marginally decreases the social class effects (Model 2). Controlling for social class, school type and city size, students of French origin perform better than students with at least one parent of non-French origin. Students enrolled in private schools perform better than students enrolled in public schools and students attending ZEP-schools perform worse than students attending a school that is not in the ZEP-program. Finally, it seems that in the country side and in smaller towns, students get better marks on average than students attending schools in Paris or in larger cities. The effects are relatively small.

Model 3 analyses to which degree social class effects on marks are mediated by parental education. The EGP I- and EGP II-effects are reduced by more than half when parental education is included. The effect of the class of non-manual workers and supervisors of

¹¹¹ The order in which the variables are added over the models may appear peculiar. One would possibly include parental education before school type and city size because this construct *determines* the school type in which parents enroll their child or the place they move to; in terms of a “chain of causation”, parents’ education even *determines* social class. However, as I employ parental education to test the mediating effect of parents’ cultural capital, I choose to include it after the control variables.

manual workers (EGP III and V) is reduced by almost one half, too. The highly significant coefficients of parental education show that – as expected – students who grow up in a home with a lot of accumulated educational resources perform better in school.

Finally, Model 4 presents the impact of grade retention in the years before the *brevet* and its interplay with social class and the other explanatory variables. The results indicate that students who have repeated at least one grade in lower secondary school achieve considerably lower marks in the continuous examinations of the *brevet* than students who have not experienced grade retention. Furthermore, two “suppression-effects” appear: First, the private school coefficient becomes significant at a higher level and it increases. Second, the coefficient of the city size category “5,000-20,000 inhabitants” increases. This indicates that grade repetition happens more often in private schools and towns of intermediate size than in public schools and larger cities.

Table 9 Social class effects on student's mark on brevet (results of linear regression)

	Model 1	Model 2	Model 3	Model 4
	b (SE)	b (SE)	b (SE)	b (SE)
<i>Social class</i> (Ref. EGP VI, VIIa)				
EGP I	2.315*** (0.08)	2.297*** (0.08)	1.062*** (0.10)	0.885*** (0.09)
EGP II	1.941*** (0.09)	1.862*** (0.09)	0.813*** (0.10)	0.670*** (0.09)
EGP III, V	0.865*** (0.07)	0.822*** (0.07)	0.465*** (0.07)	0.408*** (0.07)
EGP IVc, VIIb	1.417*** (0.14)	1.173*** (0.14)	0.741*** (0.14)	0.558*** (0.13)
EGP IVa, IVb	0.741*** (0.09)	0.663*** (0.09)	0.196* (0.10)	0.124 (0.09)
French origin		0.292*** (0.06)	0.261*** (0.06)	0.242*** (0.06)
Private school		0.165** (0.06)	0.120* (0.06)	0.199*** (0.06)
ZEP-school		-0.242* (0.10)	-0.131 (0.09)	-0.082 (0.09)
<i>City size</i> (Ref. >200,000 inh., Paris)				
< 5,000 inh.		0.420*** (0.07)	0.446*** (0.07)	0.424*** (0.07)
5,000-20,000 inh.		0.294*** (0.08)	0.334*** (0.08)	0.382*** (0.07)
20,000-200,000 inh.		0.279*** (0.07)	0.285*** (0.07)	0.252*** (0.06)
<i>Parental education</i> (Ref. Lower)				
Intermediate			0.845*** (0.06)	0.734*** (0.06)
Higher			1.709*** (0.08)	1.421*** (0.08)
Previous grade repetition				-1.893*** (0.05)
Constant	9.941*** (0.05)	9.534*** (0.08)	9.301*** (0.08)	9.909*** (0.08)
<i>N</i>	11623	11623	11623	11623
<i>R</i> ²	0.090	0.098	0.133	0.207

Note: SE=standard error adjusted for school-level clustering; * p<0.05; ** p<0.01; ***p<0.001. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

The results of binary logistic regressions of having repeated grades in lower secondary school on social class, French origin and parental education are listed in Table 10. The models do not include the control variables private school, ZEP-school and city size because grade repetition during secondary school is an outcome that does not focus on one time point but on the period between grade 5 and grade 9.¹¹² Model 1 reveals considerable social class

¹¹² I could, however, control for these factors in the different years the repetition occurs. I still refrain from doing so because this would get complicated when a student has repeated more than one grade. Furthermore, I am not interested in the confounding effects of these year-specific factors. As I test "bridging hypotheses" for an analysis that focuses on the time at which the dialogue takes place, I am only interested in the relationship

differentials in the average likelihood to repeat at least on grade during lower secondary school. Holding constant immigration background, students from the working class are significantly more likely than students from all other classes to repeat grades in lower secondary school. To an important extent, the social class effect is mediated by the educational attainment of students' parents (Model 2). The higher parents' cultural capital and hence the more accumulated "cultural resources" a student has at home, the lower is the probability that he has been retained. For instance, the probability that an average student with higher educated parents has repeated grades is, on average, 17 percentage points lower than the corresponding probability for a student with low educated parents (AME=0.17, $p<0.001$). When controlling for social class, immigration background appears to have no significant effect at all.

Table 10 Social class effects on previous grade repetition (results of binary logistic regression; AMEs)

	Model 1		Model 2	
	AME	(SE)	AME	(SE)
<i>Social class</i> (Ref. EGP VI, VIIa)				
EGP I	-0.215***	(0.01)	-0.094***	(0.02)
EGP II	-0.178***	(0.01)	-0.071***	(0.02)
EGP III, V	-0.066***	(0.01)	-0.029**	(0.01)
EGP IVc, VIIb	-0.126***	(0.02)	-0.079***	(0.02)
EGP IVa, IVb	-0.077***	(0.02)	-0.026	(0.01)
French origin	-0.014	(0.01)	-0.012	(0.01)
<i>Parental education</i> (Ref. Lower)				
Intermediate			-0.060***	(0.01)
Higher			-0.170***	(0.01)
<i>N</i>	12315		12315	
<i>AIC</i>	12596.7		12404.2	

Note: The dependent variable denotes with '1' students who have repeated at least one grade in lower secondary school (up to grade 9) and with '0' students who have not repeated grade in that period. AME=average marginal effect; SE=standard error adjusted for school-level clustering; * $p<0.05$; ** $p<0.01$; *** $p<0.001$. *Source:* Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

8.2.2 SOCIAL CLASS DIFFERENTIALS IN PARENTAL INVOLVEMENT IN SCHOOL

This section has three aims: First, I test the bridging hypotheses on social class differentials in parental involvement. I do so by running logistic binary regressions of each type of involvement presented in Subchapter 7.2.2 (attendance at parents' evenings, parents' initiation of meetings with teachers, teachers' initiation of meetings, PA-membership and holding the office as parent representative) on social class and the control variables. Second, I

between grade retention and the control variables that will be included in the analyses of the decisions along the dialogue.

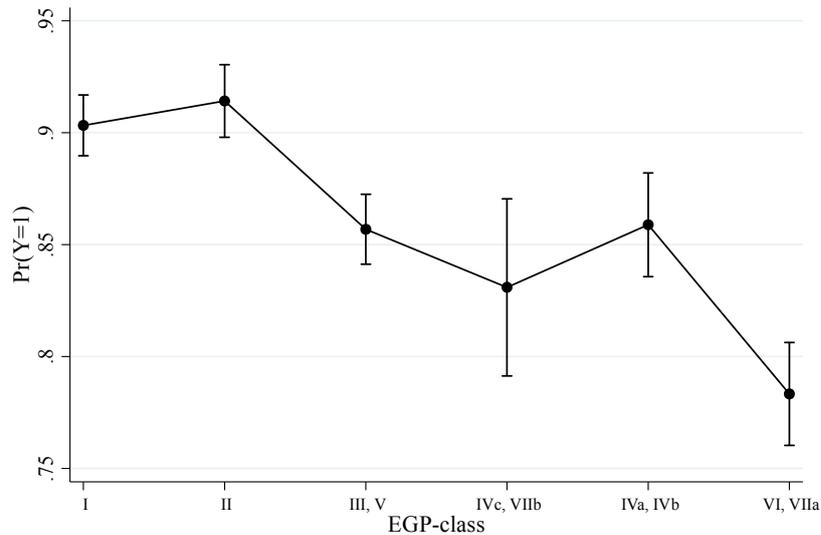
shed light on some mechanisms that generate the social class effects on parental involvement. Notably, I investigate the mediating effect of parents' cultural capital measured as parental education. Moreover, I have a look at the effect of parents' subjective performance assessment on their involvement and at interactions between social class and parents' performance assessment. The interaction effects test the assumption that higher-class parents become involved when their children perform poorly and therefore risk to not be proposed the general track. Third, I investigate social class differentials in parents' opinion on parent-teacher relationships.

I start with presenting figures that address the first aim of this section: investigating whether there are social class effects on the different parental involvement types. Figure 8 and Figure 9 present predicted probabilities that were obtained from regressions of the five involvement types on social class and the control variables French origin, school type and city size (see Model 1 in Tables A4 to A8).¹¹³ The control variables school type and city size relate to the school year 1997/1998 in which the family survey took place. As outlined in Subchapter 7.2.2, information on parental involvement was collected through this survey.

Regarding parents' attendance at parents' evenings, Figure 8 clearly shows that parents from the service classes (EGP I and II) are more likely to be involved in that way. For instance, parents attend official parent-teacher meetings with a probability of more than 90 per cent if they belong to EGP I or II while similar parents belonging to the working class (EGP VI and VIIa) do so with a probability of around 70 per cent. The social class differentials are significant but not of very large size (see also Table A4). It appears that attendance at parents' evenings is a prevalent way for parents to be involved.

¹¹³ I present the results for attendance at official parent-teacher meetings in a separate figure because the predicted probabilities are far higher than those for the other types of involvement and therefore no common y-scale could be drawn.

Figure 8 Predicted probabilities of attending parents' evenings by social class



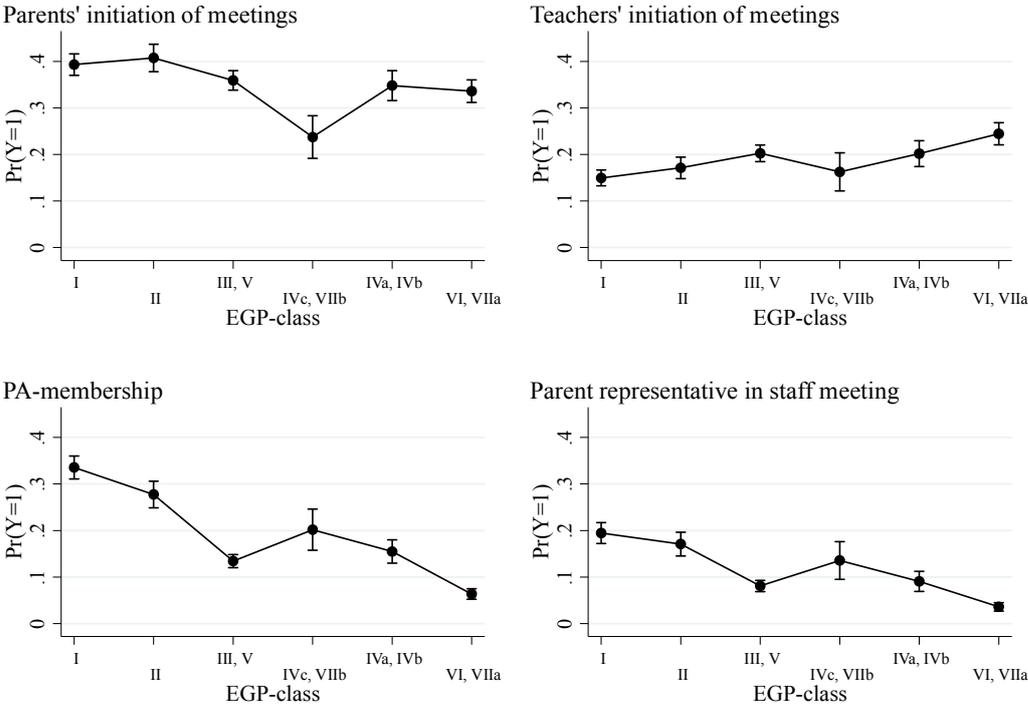
Note: Estimates obtained from Model 1 in Table A4; probabilities are calculated for students of French origin attending a public school that is located in a large city or Paris and not in a ZEP. *Source:* Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Figure 9 shows predicted probabilities for types of parental involvement that seem generally less popular: For example, the predicted probability to initiate meetings with teachers for parents who belong to EGP I is 40 per cent and, as another example, the predicted probability to be member in a parent association is around 35 per cent (see the two graphs on the left). Still, there are social class differentials regarding every type of involvement. Interestingly, some increase with social class and others decrease. The probability that parents initiate meetings slightly increases with social class and is the lowest for parents from the class of farmers and agricultural workers (EGP IVc, VIIb; $Pr=0.25$). By contrast, the likelihood that parents attend meetings initiated by teachers slightly decreases with their social class position. Hence, teachers are more likely to appoint parents from lower classes. Possibly, teachers are more likely to invite lower-class parents because parents from lower classes are less likely to initiate meetings by themselves.

Both the probability of being PA-member and of being parent representative in the staff meetings are higher for parents from higher social classes than for parents with less favorable social status. The social class differentials are stronger for PA-membership than for being parent representative in the staff meetings (see the two graphs on the bottom of Figure 9). Figure A2 in the appendix shows corresponding discrete change effects. It further illustrates that social class effects on attendance at parents' evenings, parents' initiation of meetings and

teachers' initiation of meetings¹¹⁴ are relatively small while social class differences in PA-membership and holding the office as parent representative are more considerable.

Figure 9 Predicted probabilities of parents' initiation of meetings, teachers' initiation of meetings, PA-membership and being parent representative in the staff meetings by social class



Note: PA=parent association; estimates are based on Model 1 in Tables A5, A6, A7 and A8; probabilities are calculated for students of French origin attending a public school that is located in a large city or Paris and not in a ZEP. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

The second aim of this section is to analyze mechanisms that generate the social class differentials in parental involvement. I apply the KHB-method to examine to which extent the total effect of social class on the different types of parental involvement is mediated by parental education. This analysis tests the assumption that parents from higher social classes are more likely to be involved because they are better equipped with *cultural capital* that makes them confident and successful in dealing with school staff. Table 11 reveals that social class differentials in parental education considerably explain the social class effects on

¹¹⁴ Actually, “teachers’ initiation of meetings” also implies that parents have attended these meetings. This is because the variable is based on a question that asked whether parents have had a chance to talk to teachers in meetings that were initiated by teachers. Consequently, there may have been meetings that teachers initiated but that parents did not attend. Still, for purposes of simplicity and as I assume that few parents do not come to *punctual* meetings initiated by teachers, I speak of “teachers’ initiation of meetings” and not of “parents’ attendance at meetings initiated by teachers”.

attendance at parents' evenings. For instance, the AME of EGP I is reduced from around 0.12 to 0.03 and loses its significance when parental education is included in the regression.¹¹⁵ Hence, nearly 80 per cent of the EGP I-effect is due to parents' education. Regarding the effects of EGP II and EGP III and V, it appears that parental education has less explanatory power. Still, almost 62 per cent (EGP II) and 56 per cent (EGP III and V) of these effects are due to parents' cultural capital.

Table 11 *Decomposing social class effects on attendance at parents' evenings in direct effects and indirect effects via parental education; AMEs.*

Decomposing social class (Ref. EGPVI, VIIa)	EGPI	EGPII	EGPIII, V	EGPIVc, VIIb	EGPIVa, IVb
<i>Total effect</i>	0.122***	0.136***	0.079***	0.052**	0.081***
<i>Direct effect</i>	0.025	0.052***	0.034***	0.005	0.029*
<i>Indirect effect</i>	0.097	0.083	0.044	0.048	0.053
Confounding percentage	79.41	61.57	56.38	90.04	64.93
N	12146				

Note: AME=average marginal effect, LGT= general track, LPA=vocational track; estimates obtained with Stata-command “khh” (Kohler, Karlson and Holm 2011); concomitant variables are French origin, school types and city size. Standard errors are adjusted for school-level clustering. *Source:* Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Table 12 addresses social class difference in the likelihood that parents initiate meetings with teachers and the probability that teachers initiate meetings with parents. Parental education has no mediating effect, but its inclusion causes a little increase in the effects of EGP I and EGP II (and EGP IVab). This very small suppression effect must be due to the positive correlation between social class and parental education and the negative correlation between parental education and initiation of meetings (see the negative sign of the parental education coefficient in Model 2 in Table A5). The notable finding is that parental education does not mediate the social class effect on initiation of meetings. As will be discussed below, student's performance might be of importance.

By contrast, the small social class effects on the likelihood that parents attend meetings initiated by teachers are considerably mediated by parental education. The negative AMEs are reduced when parental education is included in the regression model. The confounding percentages lie between 32 for EGP IVc and VIIb and 67 for EGP II. The effects of EGP II,

¹¹⁵ The specification of the models presented by Table 11 to 13 corresponds to that of Model 2 in Table A4 to A8 – the considered explanatory variables include social class, the controls and parental education. The ‘total effect’ corresponds to the social class effect in Model 1 in Table A4 to A8, which does not include parental education. The small differences between this “total effect”-AME and the AMEs in Model 1 in Table A4 to A8 is due to the additional rescaling by the KHB-method (see Subchapter 7.3.2).

EGP III and V and of EGP IVa and b even become insignificant. I interpret this effect as the reverse side of the social class effect on parents' initiation of meetings with teachers: Since lower-class parents do not have the cultural capital giving them the confidence and ability to get involved in school, they are less likely to attend parents' evenings and initiate meetings with teachers than parents from higher social classes. Therefore, the teachers have to invite them to come to school.

Table 12 *Decomposing social class effects on parents' initiation of meetings and teachers' initiation of meetings into direct effects and indirect effects via parental education; AMEs.*

Decomposing social class (Ref. EGPVI, VIIa)	EGPI	EGPII	EGPIII, V	EGPIVc, VIIb	EGPIVa, IVb
<i>Initiation of meetings by parents</i>					
<i>Total effect</i>	0.055***	0.069***	0.022	-0.093***	0.012
<i>Direct effect</i>	0.055*	0.069***	0.022	-0.093***	0.011
<i>Indirect effect</i>	-0.000	-0.000	0.000	0.000	0.000
Confounding percentage	-0.49	-0.16	0.57	-0.08	0.84
N	12099				
<i>Initiation of meetings by teachers</i>					
<i>Total effect</i>	-0.087***	-0.067***	-0.039***	-0.076***	-0.040*
<i>Direct effect</i>	-0.040*	-0.022	-0.017	-0.052	-0.013
<i>Indirect effect</i>	-0.047	-0.045	-0.022	-0.024	-0.027
Confounding percentage	54.25	67.01	55.68	32.02	66.59
N	12094				

Note: AME=average marginal effect, LGT= general track, LPA=vocational track; estimates obtained with Stata-command “khh” (Kohler, Karlson and Holm 2011); concomitant variables are French origin, school types and city size. Standard errors are adjusted for school-level clustering. *Source:* Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

The patterns for PA-membership and being parent representative in staff meetings are similar (Table 13). The effects of EGP I and II on both involvement types are reduced by more than half when parental education is taken into account. However, none of the class effects becomes insignificant. Hence, other factors related to social class seem to play a part. In line with previous findings (see the literature presented in Subchapter 3.1.3), the results indicate that parents who are better equipped with cultural capital are more likely to be PA-member and parent representative. The remaining social class differences could be due to parents' aspirations for their children's education and their educational motivation ($c*SD$). That is to say, parents from higher social classes may be more involved for “strategic” reasons. This assumption will be tested further below.

Table 13 *Decomposing social class effects on PA-membership and being Parent representative into direct effects and indirect effects via parental education; AMEs.*

Decomposing social class (Ref. EGPVI, VIIa)	EGPI	EGPII	EGPIII, V	EGPIVc, VIIb	EGPIVa, IVb
<i>PA-Membership</i>					
<i>Total effect</i>	0.250***	0.192***	0.059***	0.118***	0.076***
<i>Direct effect</i>	0.112***	0.090***	0.045***	0.103***	0.051***
<i>Indirect effect</i>	0.138	0.102	0.014	0.015	0.025
Confounding percentage	55.25	53.19	24.27	12.91	32.68
N	12157				
<i>Parent representative in staff meetings</i>					
<i>Total effect</i>	0.159	0.132	0.041	0.091	0.050
<i>Direct effect</i>	0.061	0.057	0.031	0.080	0.033
<i>Indirect effect</i>	0.098	0.076	0.011	0.011	0.017
Confounding percentage	61.59	57.22	25.67	12.01	34.57
N	10415				

Note: AME=average marginal effect, LGT= general track, LPA=vocational track; estimates obtained with Stata-command “khh” (Kohler, Karlson and Holm 2011); concomitant variables are French origin, school types and city size. Standard errors are adjusted for school-level clustering. *Source:* Panel national 1995 d’élèves du second degré, Ministère de l’Éducation nationale, DPD; own calculations.

To give an idea of the role of student’s performance, Model 3 in Tables A4 to A8 list the results of regressions of the different involvement types on social class, the control variables, parental education and parents’ assessment of their child’s performance.¹¹⁶ Student’s performance has a positive effect on the likelihood that parents attend parents’ evenings and on the likelihood that they are PA-member and parent representative. By contrast, student’s performance negatively affects the probability that parents initiate meetings with teachers and that teachers ask parents to meet them. It seems that parents of poorly performing students seek to meet the teachers. Parents may do so because they want to know why their child is poorly performing. Moreover, in line with the theory, these parents may want to meet the teachers in order to influence them in view of the transition to upper secondary school. In respect to teachers’ initiation of meetings, the negative sign indicates that teachers want to meet students’ parents when these have problems in school.

¹¹⁶ It would be interesting to investigate the effect of marks on the *brevet*, but since this information was gathered one year later, I prefer using parent’s subjective performance assessment which relates to the exact time point: The family survey in 1998 requested parents to evaluate their children’s performance *in the actual school year* and asked them about their involvement in the actual and hence in the same school year.

Furthermore, the social class effects on parents' initiation of meetings increase when performance is taken into account. This suppression effect is due to the fact that social class and performance are positively correlated, and social class and initiation of meetings are positively correlated while performance and initiation of meetings are negatively correlated. That means parents of poorly performing children are more likely to initiate meetings than parents of children with good marks. At the same time, parents from higher classes are more likely to do so than parents from lower classes but children from higher classes perform better and give their parents fewer reasons for initiating meeting.

As to teachers' demanding to meet the parents, the negative social class effects and the negative effects of parental education decrease when performance is factored in. This indicates that parents from lower classes are more often invited to come to school to talk to the teachers than parents from higher classes because their children are performing worse and hence the teachers want to talk to the parents. This relationship may be strengthened by the fact that higher-class parents of poorly performing children are more likely to initiate the meetings themselves.

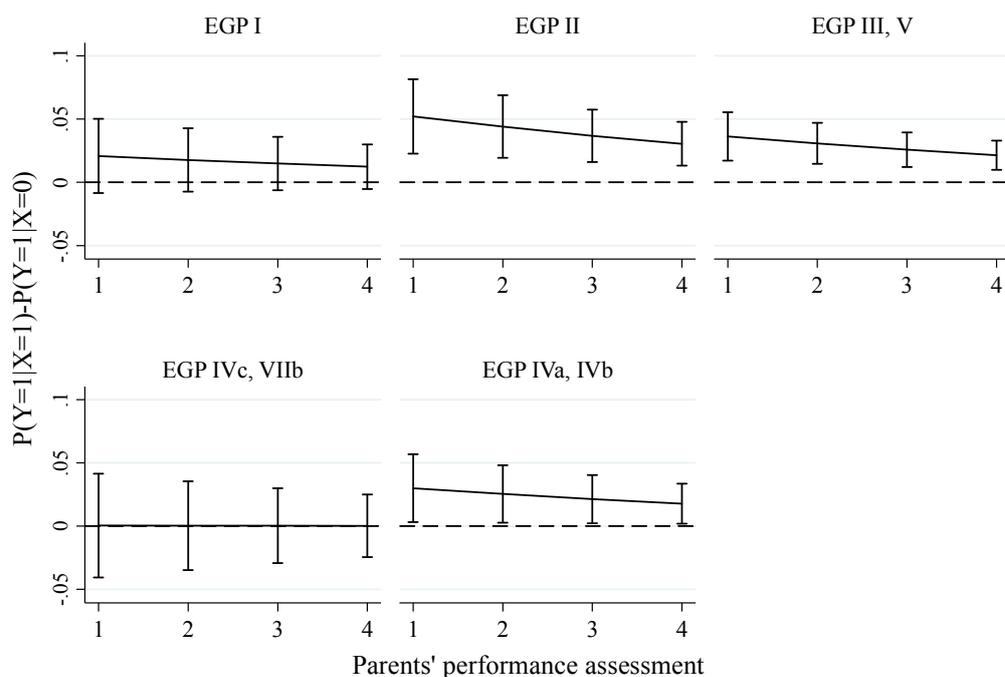
Parents' "strategic" use of their involvement

In order to examine whether parents use their cultural capital and become involved in order to influence the school staff, I conduct two additional analyses. First, I examine interaction effects of social class and parents' assessment of their child's performance and, second, I identify the direct impact of parents' educational aspirations and educational motivation (i.e. $c*SD$). The first analysis investigates whether parents reinforce their involvement when their child is poorly performing and therefore risks to not get access to the general track. The second analysis examines whether parents with high educational aspirations and parents who need their child to attend LGT to maintain the family's social status – i.e. parent with a high educational aspiration with regard to LGT – are more likely to be involved than parents with lower aspirations and no educational motivation.

Including interaction terms of social class and parents' performance assessment in the regressions of the different involvement types on social class and parental education decreases each model's explanatory power and the interaction terms are not significant (results not shown). Still, conditional effect plots based on regressions not containing interaction terms provide some weak support for the assumption that families from higher social classes become more involved when their children are poorly performing. For instance, Figure 10 reveals that the discrete change effect of EGP II on attendance at parents' evenings slightly

increases as parents' performance assessment decreases.¹¹⁷ The same is found for the discrete change effects of EGP III and V and the class of self-employed and petty bourgeoisie (EGP IVa, IVb).

Figure 10 Discrete change effects of social class on attendance at parents' evenings by parents' performance assessment



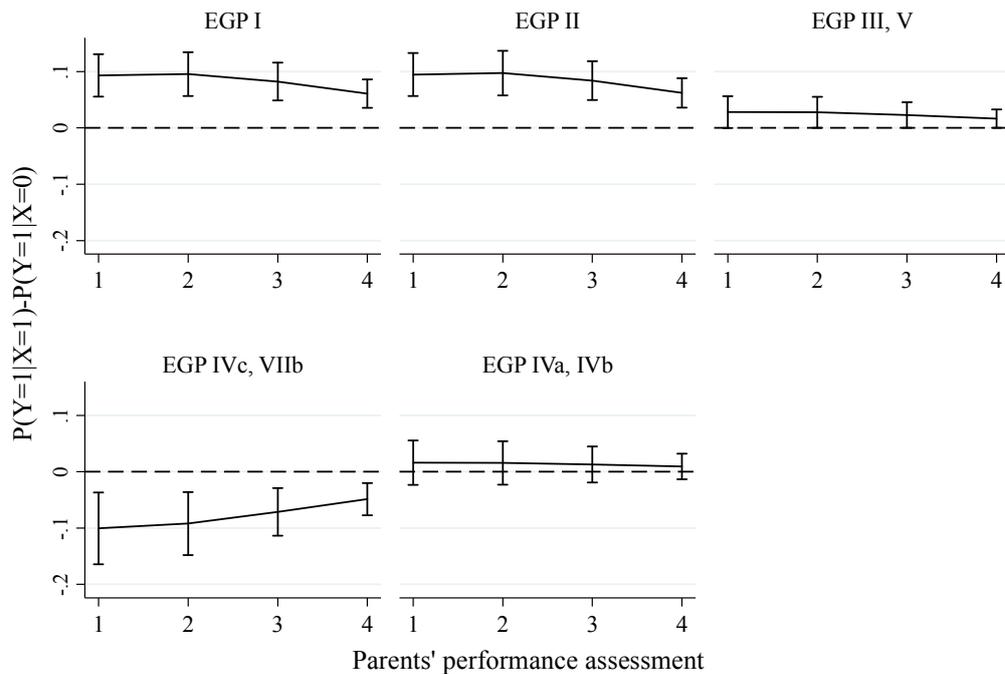
Note: Estimates obtained from Model 3 in Table A4; parents' performance assessment: 1=student with a lot of difficulties, 4=excellent student; discrete change corresponds to difference in probabilities of $Y=1$ between each social class and the reference class (EGP VI, VIIa); the probabilities are calculated for students of French origin with parents with intermediate education, attending a public school located in a large city or Paris and not in the ZEP-program; 95%-confidence intervals. *Source:* Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

The discrete change effects of EGP I and II on parents' initiation of meetings with teachers is slightly lower when parents think their children are excellent students than when parents think their children are less good than that (Figure 11). This result points in the expected direction but seems not strong enough to support the assumption that parents of low performing children who have a lot to loose from not sending their children to LGT seek more contact with teachers than parents who have less to loose. Interestingly, working class families are more likely to initiate meetings than families from the class of farmers and agricultural workers (EGPIVc, VIIb) and this probability difference is considerably larger when a child is

¹¹⁷ The discrete change effect corresponds again to the differences in the predicted probabilities for one EGP-class (e.g. EGP II) and the reference class EGP VI, VIIa (working class).

poorly performing. It could be that farmer-parents have less time than working-class parents or attach less importance to education. At least, this result confirms that the class of farmers and agricultural workers has to be observed separately.

Figure 11 Discrete change effects of social class on parents' initiation of meetings



Note: Estimates obtained from Model 3 in Table A5; discrete change corresponds to difference in probabilities of $Y=1$ between each social class and the reference class (EGP VI, VIIa); probabilities are calculated for students of French origin with parents with intermediate education, attending a public school that is located in a large city or Paris and not in a ZEP. *Source:* Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Corresponding conditional effect plots for the three other involvement types teachers' initiation of meetings, PA-membership and being parent representative are not presented. The results are available on request from the author. With regard to teachers' initiation of meetings, they reveal that the social class effects do not vary by parents' assessment of student's performance. In respect to PA-membership and being Parent representative, conditional effect plots indicate that social class effects increase as parents' performance assessment increases. Hence, PA-membership seems no type of involvement that parents from higher social classes become engaged in when their child is poorly performing and when they fear that the staff meeting will not let the child attend LGT. Instead, it seems that certain parents are particularly involved in their children's education in various ways at the same time: They are member in PAs *and* support their children a lot in other ways (e.g. through

help with homework, private tutorials) that foster their children's school performance. Another explanation could be that parents who are in PAs overestimate the performance of their children. However, corresponding analysis including marks as a more *objective* measure also shows that the discrete change effects of EGP I and II increase with students performance.¹¹⁸

The following analysis examines effects of parental aspirations and educational motivation (i.e. parameter $c \cdot SD$) on the different involvement types. It investigates whether the relatively small social class effects on parental involvement are mediated by educational aspirations and motivation and moreover what direct, independent, effects educational aspiration and educational motivation have. Table A9 and A10 in the appendix summarize the results of three nested regression models for each type of involvement. The first model always includes social class, the control variables (which are not listed), parental education and their performance assessment, the second model additionally contains the educational aspirations variable and the third model factors in educational motivation.¹¹⁹ The first models correspond to Model 3 in Tables A4 to A8, but they are based on a considerably smaller sample because the educational aspirations-variable (and the educational motivation-variable) has many missing values.

The nested regressions of attendance at parents' evenings reveal that the little, mostly non-significant – social class effects are further reduced when educational aspirations are taken into account. Parents' aspirations for their child's education have highly significant positive effects on attendance at parents' evenings. The highly significant positive effects of social class effects on parents' initiation of meetings are only marginally mediated by educational aspirations. The aspiration's impact is somewhat smaller and parents who plan that their child attains a general *bac* "L" or "ES" are, on average, even more likely to initiate meetings than parents who aspire after a *bac* "S". This indicates that parents who already have *specific* relatively ambitious plans for their children seek to meet the teachers. The slight

¹¹⁸ As robustness checks, all the figures were generated with the mark-variable instead of the subjective performance assessment: The curves look very similar for all involvement types. Results are available on request from the author.

¹¹⁹ The second and the third model reduce the sample size considerably because the aspiration-variable ("planned secondary school orientation") was measured only in the paper questionnaire of the family survey. The high number of missing values is the reason why the effect of parents' educational aspirations and educational motivation is analyzed separately in this subsection. The variable "planned secondary school orientation" has six categories: (1) "apprenticeship/CAP/BEP" including also parents who said their child should enter the labor market; (2) "professional *bac*"; (3) "technological *bac*"; (4) "general *bac*" combining parents who reported that they planned to let their child do a general *bac*, regardless of which curricula; (5) "general *bac* L/ES"; (6) "general *bac* S" (see Subchapter 2.2). To give an overview on the distribution of the categories in the *basic sample*: Among the 7906 valid cases 16 per cent are in category (1), 11 per cent in (2), 6 per cent in (3), 34 per cent in (4), 9 per cent in (5) and 24 per cent in category (6).

increase of the performance assessment coefficient is due to a positive correlation between performance and aspirations.¹²⁰ Social class differentials in the likelihood that parents are PA-member or parent representative are mediated to some small extent by educational aspirations. The direct positive effects of educational aspirations reveal that especially parents who want their child to attain a general *bac* (regardless of which general *bac* type) are on average the most likely to be PA-member. In respect to the likelihood of being parent representative, the educational aspirations effects are smaller and significant at a lower level.

The impact of a family's educational motivation – i.e. a family's "need" to have the child attend the general track to preserve the family's social status – is not the same for every involvement type. Regarding parents' evenings, PA-membership and being parent representative, the model fit increases less when educational motivation is included as compared to when educational aspirations are considered. By contrast, in respect to parents' initiation of meetings with teachers, educational motivation contributes comparatively more to the model fit. In the same line, educational motivation seems to explain slightly less – as compared to educational aspirations – of the social class effects on parents' evening attendance, PA-membership and holding the office as parent representative but slightly more of the social class effect on parents' initiation of meetings. The direct effects of educational motivation tell that parents with a higher educational motivation are more likely than parents with no educational motivation to be involved in the four ways. Intermediate motivation has only a weakly significant effect on attendance at parents' evenings.

In sum, it seems again that parents have different reasons to get involved in specific ways. While parents with high aspirations are *generally* involved in various ways, parents who believe that higher education is necessary to get a job are particularly likely to initiate meetings with teachers. Moreover, social class effects on parents' initiation of meetings are more reduced when educational motivation is taken into account than when aspirations are factored in. This result could be interpreted as evidence in favor of the assumption that higher-class parents seek contact with teachers because they are concerned a lot with having their child attend the general track. Possibly, they want to meet the teachers to influence them in view of the approaching transition to upper secondary school.

¹²⁰ The analysis of teachers' initiation of meetings shows that parents' higher aspirations reduce the probability that the school invites them for a talk (results are not presented). The reason for this effect could be again that parents with high aspirations initiate meetings by themselves.

Parents' opinion on parent-teacher relationships

Table 14 presents results of binary logistic regressions of two dummy variables based on the three categories of the variable “parents’ opinion on parent-teacher relationships”. The first binary dependent variable distinguishes parents thinking that they should meet the teachers when there is a problem from parents thinking that they should rather not bother the teachers; the second dummy variable differentiates between parents who think that they should meet the teachers frequently and parents who have the opinion that they should rather not bother the teachers. For each dependent variable there are three models: The first model includes only social class and the control variables to identify general social class differences; the second model additionally contains parental education; the third model factors in the different involvement types.¹²¹

Both first models reveal that, net of the effects of the control variables, parents from the service classes and from EGP-class III and V are more likely to think that they should meet the teachers *at least* when there is a problem than parents from the working class. Another interesting highly significant effect is that of private school: Parents who enrolled their children in a private school are significantly more likely to think that they should meet the teachers frequently (instead of not bother them at all) than parents with children attending a common public school. There is no such effect regarding the opinion that parents should meet the teachers when there is a problem. This indicates – as one would expect – that parents who enroll their children in private schools are very interested in working closely with teachers.

The second models take into account parental education. As the social class effects are considerably reduced and most of them fully lose their significance, I conclude that parent’s cultural resources in terms of their knowledge of the school system and their capacities and confidence in dealing with school staff “mediate” the social class effects on their opinion on parent-teacher relations. In other words, parents who are more familiar with school issues because they have spent more time in the educational system are more likely to think that they should work together with the teachers or, at least, should confer with the teachers when their children have problems. This result could also be interpreted as support for the assumption that higher educated parents have the self-assurance and ability to approach the teachers. An

¹²¹ I generally refrain from applying multinomial regressions for the analyses presented in this book because – in my view – there is no reliable procedure implemented in STATA to calculate AMEs from multinomial regressions. I am aware of the statistical advantages of multinomial regression analyses but since I compare coefficients over models and need to interpret AMEs I prefer running separate binary regression models. Robustness analyses with the multinomial regression technique reveal that differences in the results are marginal. Results are available on request.

application of the KHB-method confirms that around 100 per cent of the effects of EGP I and II on the probability of thinking that parents should meet the teachers when there is a problem is due to parental education (see Table A11). Regarding the probability of thinking that parents should meet the teachers frequently, the confounding percentage is 94 for the EGP I-effect and 69 for the EGP II-effect.

The third models include parental involvement. Holding constant social class, parental education and the control variables, parents attending parents' evenings and initiating meetings with teachers are significantly more likely to think that they should meet teachers when there is a problem (instead of never meet). The coefficients are highly significant ($p < 0.001$) and of considerable size. PA-membership has a smaller effect that is significant at the lowest level ($p < 0.01$). With regard to parents' opinion that they should meet teachers frequently, all types of parental involvement – except teachers' initiation of meetings – have positive highly significant effects. Only the effect of being parent representative is significant at an intermediate level ($p < 0.05$). This result indicates, again, that the different types of involvement have different purposes: While PA-membership is associated with a general strong commitment to close parent-teacher relationships, initiation of meetings and attendance at parents' evenings seem a “basic” level of involvement which implies that parents become engaged when there is a problem.

Table 14 Social class effects on parents' opinion on parent-teacher relationships (results of binary logistic regressions; AMEs)

	Meet when problem vs. better not meet			Meet frequently vs. better not meet		
	Model 1 AME (SE)	Model 2 AME (SE)	Model 3 AME (SE)	Model 1 AME (SE)	Model 2 AME (SE)	Model 3 AME (SE)
<i>Social class</i> (Ref. EGPVI, VIIa)						
EGPI	0.084*** (0.02)	-0.004 (0.03)	-0.022 (0.03)	0.103*** (0.02)	0.006 (0.02)	-0.031 (0.02)
EGPII	0.077** (0.02)	0.002 (0.03)	-0.016 (0.03)	0.121*** (0.02)	0.038 (0.02)	-0.002 (0.02)
EGPIII, V	0.072*** (0.02)	0.038* (0.02)	0.024 (0.02)	0.071*** (0.02)	0.035* (0.01)	0.014 (0.01)
EGPIVc, VIIb	0.023 (0.04)	-0.011 (0.04)	-0.009 (0.03)	0.034 (0.03)	-0.009 (0.03)	-0.011 (0.03)
EGPIVa, IVb	0.057* (0.03)	0.021 (0.02)	0.010 (0.02)	0.055* (0.02)	0.012 (0.02)	-0.012 (0.02)
French origin	0.017 (0.02)	0.015 (0.02)	0.016 (0.02)	0.015 (0.01)	0.011 (0.01)	0.003 (0.01)
Private school	0.018 (0.02)	0.016 (0.02)	0.003 (0.02)	0.059*** (0.01)	0.056*** (0.01)	0.034** (0.01)
ZEP-school	-0.040 (0.02)	-0.031 (0.02)	-0.025 (0.02)	0.003 (0.02)	0.012 (0.02)	0.017 (0.02)
<i>City size</i> (Ref. >200,000 inh., Paris)						
< 5,000 inh.	-0.037 (0.02)	-0.037 (0.02)	-0.037* (0.02)	-0.006 (0.01)	-0.006 (0.01)	0.008 (0.01)
5,000-20,000 inh.	-0.031 (0.02)	-0.028 (0.02)	-0.022 (0.02)	-0.011 (0.01)	-0.010 (0.01)	0.003 (0.01)
20,000-200,000 inh.	-0.014 (0.02)	-0.015 (0.02)	-0.013 (0.02)	-0.007 (0.01)	-0.007 (0.01)	0.003 (0.01)
<i>Parental education</i> (Ref. Lower)						
Intermediate		0.085*** (0.02)	0.060*** (0.02)		0.087*** (0.01)	0.050*** (0.01)
Higher		0.117*** (0.02)	0.081*** (0.02)		0.129*** (0.02)	0.075*** (0.02)
Parents' evenings			0.159*** (0.01)			0.207*** (0.01)
Parents' initiation of meetings			0.089*** (0.02)			0.162*** (0.01)
Teachers' initiation of meetings			0.008 (0.02)			0.023 (0.01)
PA-membership			0.069* (0.03)			0.078*** (0.02)
Parent representative			0.039 (0.04)			0.071** (0.03)
<i>N</i>	4917	4917	4917	6312	6312	6312
<i>AIC</i>	5484.2	5448.6	5281.2	6115.4	6051.7	5462.0

Note: AME= average marginal effect, SE=standard error adjusted for school-level clustering; * p<0.05; ** p<0.01; ***p<0.001. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

8.3 Family's decisions

The following analyses address families' decision-making within the dialogue. First, I test bridging hypotheses on social class differences in the subjective decision-making parameters such as likelihood of success (i.e. p) and in the proxies for certain parameters (e.g. employment situation for C). Second, I test the formalized theoretical model. This test consists of two parts: In the first part, I analyze the "core" of the decision-making model, i.e. the model advanced by Esser (1999b). In the second part, I examine the impact of parents' evaluation of the likelihood that the staff meeting will accept their request. Hence, the second part takes into account the impact of the institutional context. Third, I analyze families' rejection decisions.

8.3.1 SPECIFIC "BRIDGING HYPOTHESES"

Table A12 lists means of the variables used in the analysis of families' school track requests by family's social class. These descriptive statistics already provide insights in the associations between social class and the subjective decision-making parameters and thus represent a preliminary test of the bridging hypotheses. As expected, there are large social class differentials in parents' subjective evaluation of their children's performance. I assume that these social class effects represent social class differentials in parents' subjective assessment of their children's *likelihood of success* (i.e. the parameter p) and therefore capture the part of the primary effects that operates through families' decision-making.

Further, linear regressions reveal that EGP I-parents rate their children, on average, 0.48 points better than parents from the working class – controlling for French origin, school type and city size (Model 1 in Table 15). The corresponding advantage of EGP II-students is 0.34 points and that of students from the class of non-manual workers and supervisors of manual workers (EGP III and V) is 0.08. Parents belonging to the class of farmers and agricultural workers report their children to be better on average ($b=0.29$). All of these effects are highly significant. Only the effect of the class of self-employed and petty bourgeoisie is relatively small and significant at a lower level.

In order to examine to which extent social class effects on the subjectively evaluated likelihood of success are driven by the primary effects or, more specifically, by the association between social class and "objective" school performance, I include marks in the regression (Model 2). This analysis also investigates whether there is a "bias" in parents' subjective assessment of their children's performance, i.e. whether parents from higher classes

tend to overestimate their children's performance. The extended regression model shows that – as expected – the social class effects on parent's subjective assessment are nearly fully mediated by marks. Still, a little “bias” appears: Parents from EGP I rate their children 0.05 points better than working-class parents. However, this small effect is only marginally significant. The suppression effect for EGP-class III and V indicates that given the same actual performance level parents from this class rate their children lower than parents from the working class.

Table 15 Social class effects on parents' subjective performance assessment (results of linear regressions)

	Model 1		Model 2	
	b	(SE)	b	(SE)
<i>Social class</i> (Ref. EGPVI, VIIa)				
EGP I	0.483***	(0.03)	0.048*	(0.02)
EGP II	0.335***	(0.03)	-0.017	(0.02)
EGP III, V	0.081***	(0.02)	-0.077***	(0.02)
EGP IVc, VIIb	0.287***	(0.05)	0.046	(0.04)
EGP IVa, IVb	0.099**	(0.03)	-0.032	(0.03)
French origin	-0.031	(0.02)	-0.077***	(0.02)
Private school	-0.067***	(0.02)	-0.082***	(0.02)
ZEP-school	-0.023	(0.03)	0.022	(0.02)
<i>City size</i> (Ref. >200,000 inh., Paris)				
< 5,000 inh.	0.023	(0.02)	-0.065***	(0.02)
5,000-20,000 inh.	-0.006	(0.02)	-0.057**	(0.02)
20,000-200,000 inh.	0.033	(0.02)	-0.031	(0.02)
Mark			0.193***	(0.00)
Constant	2.490***	(0.03)	0.608***	(0.03)
N	9002		9002	
AIC	20849.7		15814.0	

Note: SE=standard error adjusted for school-level clustering; * p<0.05; ** p<0.01; ***p<0.001. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

To analyze social class differentials in families' subjective evaluation of their resources to account for the costs of education, I conduct a binary logistic regression of families' employment situation on social class (Table 16). The dependent variable indicates whether both parents in the family are not employed (1) or whether at least one parent is working (0). Model 1 shows that controlling for French origin, school type and city size, the probability of being in such an unfavorable economic situation is, on average, for EGP I- and EGP II-families around 10 percentage points lower than for working-class families. In the same fashion, the probability is around 7 percentage points lower for families from the class of non-manual workers and supervisors of manual workers (EGP III, V). Further, students with no parent of French origin are more likely to have only non-working parents and so are students enrolled in ZEP-schools and living in larger cities or Paris. Students enrolled in a private

school are less likely to have only non-working parents than families whose children attend public schools (AME=-0.015; p<0.05).

Model 2 takes into account number of siblings – the second variable I use as an indicator of family’s available economic resources – to analyze whether it partly *explains* the effect of social class on employment status.¹²² When number of siblings is included, the social class effects are somewhat reduced but remain significant at a high level (p<0.001). Moreover, the variable has a highly significant positive effect on the likelihood that a student has only non-working parents (AME=0.016; p<0.00).

Table 16 Social class effects on family’s employment situation (results of binary logistic regressions; AMEs)

	Model 1		Model 2	
	AME	(SE)	AME	(SE)
<i>Social class</i> (Ref. EGPVI, VIIa)				
EGP I	-0.101***	(0.01)	-0.075***	(0.01)
EGP II	-0.098***	(0.01)	-0.072***	(0.01)
EGP III, V	-0.074***	(0.01)	-0.046***	(0.01)
EGP IVc, VIIb	-0.075**	(0.02)	-0.055**	(0.01)
EGP IVa, IVb	-0.078***	(0.01)	-0.052***	(0.01)
French origin	-0.042***	(0.01)	-0.023***	(0.01)
Private school	-0.015*	(0.01)	-0.013	(0.01)
ZEP-school	0.035***	(0.01)	0.019*	(0.01)
<i>City size</i> (Ref. >200,000 inh., Paris)				
< 5,000 inh.	-0.020**	(0.01)	-0.017*	(0.01)
5,000-20,000 inh.	-0.008	(0.01)	-0.007	(0.01)
20,000-200,000 inh.	-0.004	(0.01)	-0.003	(0.01)
Number of siblings			0.016***	(0.00)
<i>N</i>	9002		9002	
<i>AIC</i>	3521.9		3383.5	

Note: AME=average marginal effect; SE=standard error adjusted for school-level clustering; * p<0.05; ** p<0.01; ***p<0.001. Source: Panel national 1995 d’élèves du second degré, Ministère de l’Éducation nationale, DPD; own calculations.

With regard to the association between social class and number of siblings, I do not run a regression and refer to the bivariate analysis presented in Table A12 in the appendix. Table A12 indicates that there is no linear negative relationship between social class and number of siblings, but working-class families clearly have more children on average (mean EGP VI, VIIa=2.43) than families from all other EGP-classes (e.g. mean EGP I=1.63).

Table 17 addresses social class differentials in families’ subjective evaluation of the costs and likelihood of status decline that they associate with LGT. As explained in

¹²² As I mentioned before, I am generally not able to detect *causal* effects or to take into account *endogeneity*. In this case, employment status could also be the *reason* for families to have a certain number of children and must not necessarily be a *consequence* of number of children.

Subchapter 5.1.1, this mechanism corresponds to families' *relative risk aversion* and the costs and likelihood of status decline can be reformulated as a "positive" concept, namely the *educational motivation* ($c*SD$). As the variable that measures the educational motivation consists of three categories, I run one binary logistic regression of "high educational motivation" as compared to "no educational motivation" and another binary logistic regression of "intermediate educational motivation" as compared to "no educational motivation". The results reveal that social class has a very strong positive and highly significant effect on having a high educational motivation as compared to having none. By contrast, social class has almost no effect at all on having an intermediate educational motivation as compared to having none. While the probability of an average EGP I-student in the sample to have parents who have a high educational motivation is 52 percentage points higher than for an average working-class student, the same probability-difference is only 5 percentage points with regard to parents' having an intermediate educational motivation. Families with immigration background have a higher educational motivation than French families. The result corresponds to the finding of previous research that – controlling for social class – parents and students with immigration background have higher educational aspirations. Moreover, families from larger cities and Paris are more likely to have a high and intermediate educational motivation than families from more rural regions.

As social class effects on the differentiation between intermediate and no educational motivation are very small, it appears that the *educational motivation*-mechanism, i.e. the social class variation of families' "need" to have their children attend the general track to preserve their social class position, is only weak. Still, the result is in line with the theory and does not challenge the variable's operationalization since there are strong social class effects on the differentiation between high and no educational motivation. If we consider the original item on which the variable is based, the results indicate that social class has no effect on whether parents think that a general or technological *bac* is more necessary to find a job than a lower educational attainment or no attainment at all. By contrast, social class has a strong effect on whether parents think that a tertiary attainment is more beneficial than a lower educational attainment or no attainment at all. Possibly, all families think a general or a technological *bac* lead to similar "low" social class positions while a tertiary diploma gives access to positions that are a lot more favorable than the positions that are attainable with the secondary degrees.

Table 17 Social class effects on family's educational motivation (results of binary logistic regressions; AMEs)

	High vs. no educational motivation		Intermediate vs. no educational motivation	
	AME	(SE)	AME	(SE)
<i>Social class</i> (Ref. EGP VI, VIIa)				
EGP I	0.517***	(0.02)	0.049*	(0.02)
EGP II	0.343***	(0.02)	0.026	(0.02)
EGP III, V	0.138***	(0.01)	0.016	(0.01)
EGP IVc, VIIb	0.159***	(0.03)	0.025	(0.03)
EGP IVa, IVb	0.182***	(0.02)	0.020	(0.02)
French origin	-0.077***	(0.01)	-0.039**	(0.02)
Private school	-0.006	(0.01)	-0.016	(0.01)
ZEP-school	-0.006	(0.02)	0.003	(0.02)
<i>City size</i> (Ref. >200,000 inh., Paris)				
< 5,000 inh.	-0.104***	(0.02)	-0.054***	(0.02)
5,000-20,000 inh.	-0.081***	(0.02)	-0.048**	(0.02)
20,000-200,000 inh.	-0.015	(0.01)	-0.011	(0.02)
<i>N</i>	7913		5282	
<i>AIC</i>	9645.9		5361.7	

Note: AME=average marginal effect; SE=standard error adjusted for school-level clustering; * p<0.05; ** p<0.01; ***p<0.001. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Table 18 investigates social class differentials in parents' knowledge of their right to reject the proposition by the staff meeting. The presented results of binary logistic regressions reveal that – as expected – parents from higher social classes are more likely to know about their rejection right than working-class parents (Model 1). Parents from EGP-class III and V are also significantly more likely to have that educational knowledge. Model 2 takes into account parental education to examine whether parents who have spent more time in the educational system know more about it because of their own experience and because they are more sensitive to such knowledge.¹²³ In fact, this analysis examines whether parents' knowledge is part of their cultural capital. As expected, the social class effect decreases when parental education is taken into account. Moreover, parental education has a strong highly significant independent effect. Interestingly, parents with intermediate education are slightly more likely to know their right to reject than parents with higher education (AME=0.80 vs. AME=0.75, p>0.001). Generally, this analysis provides evidence in favor of the assumption that higher-class parents are better equipped with cultural capital that is beneficial in the school context.

¹²³ Since only the 1989 Orientation Law effectively implemented the dialogue, I do not assume that students' parents know their right to reject from their own time in the school system. However, I propose that parents' more or less longish experience in the educational system has influenced their ability to understand and make use of its functioning. For instance, parents who have studied in university were more autonomous than parents who did an apprenticeship and therefore they had to learn how to understand the university system's functioning to successfully complete their studies.

The aim of Model 3 is to investigate how different parental involvement types are related to parents' educational knowledge and social class. Indeed, the social class effects and the effects of parents' education are slightly reduced when parents' involvement is taken into account. It appears that parents' initiation of meetings with teachers has a highly significant positive effect. This indicates that parents who make the effort to contact teachers are aware that they can reject the staff meeting's proposition while parents who are not active in that way are more likely to not know that they have this right. Attendance at parents' evenings and PA-membership has also positive effects but these effects are significant at a lower level. Finally, taking into account parents' opinion on parent-teacher relationships causes no further decrease of the social class effects (Model 4). The highly significant net effects of parents' opinion on parent-teacher relations show that parents who believe that teachers and parents should meet frequently are the most likely to know their right to reject ($AME=0.075$; $p<0.00$).

Table 18 Social class effects on family's knowledge of the right to reject the staff meeting's proposition (results of binary logistic regression; AMEs)

	Model 1 AME (SE)	Model 2 AME (SE)	Model 3 AME (SE)	Model 4 AME (SE)
<i>Social class</i> (Ref. EGP VI, VIIa)				
EGP I	0.152*** (0.01)	0.097*** (0.02)	0.091*** (0.02)	0.091*** (0.02)
EGP II	0.151*** (0.01)	0.099*** (0.02)	0.092*** (0.02)	0.091*** (0.02)
EGP III, V	0.092*** (0.01)	0.059*** (0.01)	0.055*** (0.01)	0.053*** (0.01)
EGP IVc, VIIb	0.068* (0.03)	0.030 (0.03)	0.031 (0.03)	0.032 (0.03)
EGP IVa, IVb	0.071*** (0.02)	0.034 (0.02)	0.031 (0.02)	0.030 (0.02)
French origin	0.049*** (0.01)	0.044*** (0.01)	0.043*** (0.01)	0.043*** (0.01)
Private school	-0.001 (0.01)	-0.004 (0.01)	-0.009 (0.01)	-0.011 (0.01)
ZEP-school	-0.016 (0.01)	-0.009 (0.01)	-0.009 (0.01)	-0.010 (0.01)
<i>City size</i> (Ref. >200,000 inh., Paris)				
< 5,000 inh.	0.009 (0.01)	0.007 (0.01)	0.010 (0.01)	0.010 (0.01)
5,000-20,000 inh.	0.001 (0.01)	0.001 (0.01)	0.003 (0.01)	0.003 (0.01)
20,000-200,000 inh.	0.004 (0.01)	0.003 (0.01)	0.005 (0.01)	0.006 (0.01)
<i>Parental education</i> (Ref. Lower)				
Intermediate		0.080*** (0.01)	0.075*** (0.01)	0.072*** (0.01)
Higher		0.075*** (0.01)	0.067*** (0.01)	0.063*** (0.01)
Parents' evenings			0.035** (0.01)	0.021 (0.01)
Parents' initiation of meetings			0.034*** (0.01)	0.027** (0.01)
Teachers' initiation of meetings			0.019 (0.01)	0.018 (0.01)
PA-membership			0.024* (0.01)	0.019 (0.01)
<i>Opinion on parent-teacher relation</i> (Ref. Better not meet)				
Meet when problem				0.055*** (0.01)
Meet frequently				0.075*** (0.01)
N	9002	9002	9002	9002
AIC	8297.9	8239.5	8212.0	8183.4

Note: AME=average marginal effect; SE=standard error adjusted for school-level clustering; *p<0.05; **p<0.01; ***p<0.001. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

8.3.2 TESTING THE DECISION-MAKING MODEL

The results of binary logistic regressions of family's school track request are listed in Table 19. Model 1 contains only the EGP-classes and the control variables. Its results provide evidence in favor of *Hypothesis H1* as they indicate strong social class differentials in the likelihood that a family demands the general track (LGT) instead of the vocational track (LPA). On average, families from the higher salariat (EGP I) have a probability that is 43 percentage points higher than the corresponding probability for working-class families (EGP VI and EGP VIIa). EGP II-families have, on average, a probability that is 36 percentage points higher and families belonging to the class of routine non-manual workers and supervisors of manual workers (EGP III and EGP V) have an AME of 0.176.

With regard to the control variables, it is interesting to note that French origin has a negative strongly significant effect indicating, again, the result that is in line with previous research: Given the same social origin, families with immigration background have higher educational aspirations than native families. Being enrolled in a ZEP-school decreases the likelihood of requesting LGT. Families living in larger cities or Paris are more likely to opt for LGT than families whose children attend schools in smaller towns. As suggested in the literature, this effect could be driven by more available places in vocational upper secondary schools of rural neighborhoods and higher rates of working class families in these areas (see Subchapter 7.2.4).

With Model 2 I start testing families' *independent* decision-making, i.e. how they would decide if the school would not have the final say. I thereby test *Hypothesis H2*. As outlined in the theory chapter of this dissertation, this part of the theoretical model corresponds to the model by Esser (1999b). Step-wisely, I include the different *core* decision-making parameters to observe their interrelation with the other variables and the dependent variable (Model 2 to Model 4). Additionally, Table A14 in the appendix presents the results of a KHB-application to the model that contains all the parameters of the independent decision-making model (Model 4 in Table 19). While the results of the KHB-approach tell to which extent the different parameters contribute to the *gross* social class differences obtained through Model 1, Table 18 shows how each coefficient changes as additional variables are included.

Table 19 Social class effects on family's school track request (LGT vs. LPA): test of the model on family's "independent decision-making" (results of binary logistic regression; AMEs)

	Model 1		Model 2		Model 3		Model 4	
	AME	(SE)	AME	(SE)	AME	(SE)	AME	(SE)
<i>Social class</i> (Ref. EGPVI, VIIa)								
EGPI	0.433***	(0.01)	0.342***	(0.01)	0.328***	(0.01)	0.260***	(0.01)
EGPII	0.363***	(0.02)	0.274***	(0.01)	0.259***	(0.01)	0.203***	(0.01)
EGPIII, V	0.176***	(0.02)	0.146***	(0.01)	0.129***	(0.01)	0.101***	(0.01)
EGPIVc, VIIb	0.184***	(0.03)	0.090***	(0.03)	0.081**	(0.03)	0.055*	(0.02)
EGPIVa, IVb	0.209***	(0.02)	0.170***	(0.02)	0.155***	(0.02)	0.121***	(0.02)
French origin	-0.038***	(0.01)	-0.027**	(0.01)	-0.037***	(0.01)	-0.025*	(0.01)
Private school	-0.010	(0.01)	0.001	(0.01)	-0.001	(0.01)	-0.003	(0.01)
ZEP-school	-0.051**	(0.02)	-0.047***	(0.01)	-0.036**	(0.01)	-0.034**	(0.01)
<i>City size</i> (Ref. >200,000 inh., Paris)								
< 5,000 inhabitants	-0.079***	(0.01)	-0.084***	(0.01)	-0.085***	(0.01)	-0.067***	(0.01)
5,000-20,000	-0.059***	(0.01)	-0.058***	(0.01)	-0.058***	(0.01)	-0.045***	(0.01)
20,000-200,000	-0.018	(0.01)	-0.024*	(0.01)	-0.025*	(0.01)	-0.022*	(0.01)
Parents' performance assessment (<i>p</i>)			0.222***	(0.00)	0.221***	(0.00)	0.199***	(0.00)
Number of siblings (<i>C</i>)					-0.012***	(0.00)	-0.013***	(0.00)
No parent working (<i>C</i>)					-0.046**	(0.02)	-0.037*	(0.02)
<i>Educational motivation</i> (<i>c</i> * <i>SD</i>)								
(Ref. None)								
Intermediate							0.070***	(0.01)
High							0.182***	(0.01)
<i>N</i>	9002		9002		9002		9002	
<i>AIC</i>	9253.9		7425.4		7400.3		7017.5	

Note: AME=average marginal effect; SE=standard error adjusted for school-level clustering; * p<0.05; ** p<0.01; ***p<0.001. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Including parent's assessment of their child's school performance reduces the social class coefficients to some extent but they remain highly significant (Model 2). Parent's subjective evaluation of their child's chances of success has a strong positive effect on the probability that a family demands the general track: the probability increases, on average, by 22 percentage points with every additional point on the 4-point scale of the performance assessment. The sharp decrease of the AIC-value indicates that school performance or the subjective likelihood of success considerably enhances the explanatory power of the regression model.

Adding the variables that represent families' economic resources (i.e. number of siblings and employment situation) causes no major decrease of the AIC-value (Model 3). Also, the social class effects are only slightly reduced. Still, the coefficients of number of siblings and "no working parent" have the expected signs and are significant at least at the intermediate level ($p < 0.01$). Holding constant social class, parents' performance assessment and the control variables, every additional sibling decreases the likelihood that a student's family demands the general track by 1.2 percentage points, on average. Moreover, if there is no employed parent in a family the average likelihood is 4.6 percentage points lower than if there is at least one working parent. Finally, the inclusion of a family's educational motivation ($c*SD$) yields a considerable decrease of the social class effects and importantly augments the model-fit. Both the effects of a high and an intermediate educational motivation (as compared to no educational motivation) are highly significant. On average, the likelihood that parents who have a high educational motivation demand the general track is 18 percentage points higher than the probability that parents who have no educational motivation make such a demand; the percentage difference is 7 for parents with intermediate educational motivation.¹²⁴

Applying the KHB-method reveals that social class differentials in families' school track requests are due to more than 40 per cent to the *independent* decision-making model (Table A13). Only the effect of EGP IVc and VIIb (the class of farmers and agricultural workers) is even due to 69 per cent to the core part of the theoretical model. The indirect effect of the parameters of the theoretical model is driven mainly by social class differentials

¹²⁴ The theoretical model yields an interaction between the educational motivation ($c*SD$) and the likelihood of success (p). This interaction suggests that when a child has low chances of success ($1-p$), the risk of status decline is very high for higher classes but for lower classes it is minor or zero. Hence, the effect of the educational motivation on the school track decision can be expected to be higher when the likelihood of success is low as compared to when the chances of success are high. This contributes to the generation of the secondary effects because higher classes have a higher educational motivation. To test this interaction, I have included an interaction term of performance assessment and educational motivation in the regression that already contains the core decision-making parameters, i.e. Model 4. The model fit does not increase and the interaction term is not significant. Therefore, I find no support for this assumption.

in parents' assessment of their child's performance (i.e. the "subjective part" of the primary effects) and parents' educational motivation. Family's economic resources have no important mediating effect.

In sum, this first analysis shows that parents' evaluation of the core parameters of the decision-making model (probability of success, costs of education, likelihood and costs of status decline) is far from explaining the whole social class differentials in families' school track requests. This yields various conclusions. On the one hand, other mechanisms than those proposed by the "classical" RAT-models may contribute to the generation of the social class effects. Such mechanisms could be, for instance, class-specific norms and values or preferences. Alternatively, as suggested by the theoretical model developed in Chapter 5, a family's evaluation of the likelihood that the staff meeting accepts their requests (i.e. the parameter l) could contribute to the generation of the social class effects. That is to say, social class differences in the indicators parents use to assess the likelihood that the staff meeting accepts their LGT-requests (e.g. parents' cultural capital, involvement in school and student's mark) reinforce social class effects on families' requests. On the other hand, the operationalization of the decision-making parameters possibly misses to capture all of the subjective "calculations" of the parents. All in all, the results support *Hypothesis H2*: The social class differentials in families' decisions are *partly* mediated by the core decision-making parameters. However, 40 per cent is a comparatively low rate as this implies that 60 per cent will have to be explained by social class differences in families' evaluation of the likelihood that the staff meeting will accept their request and hence by cultural capital and marks.

The following regressions test *Hypothesis H3* and examine whether the remaining social class effects are due to the fact that the decision-making occurs in the specific institutional context of the dialogue. The relevant features of this context are the subsequent propositions by the staff meeting and families' right to reject that proposition with some effort. This institutional context "requires" that I add to the model including the core decision-making parameters (Model 4 in Table 19) variables that represent the indicators parents use to evaluate l , i.e. the likelihood that the staff meeting will accept their LGT-request. The indicators consist of "objective" performance measures, parental education and parental involvement in school. The idea behind this analysis is that higher-class parents are better equipped with cultural capital in the form of abilities and knowledge and therefore are more involved in school. In turn, these beneficial cultural resources and their involvement make them more confident that the staff meeting will accept their request and, as a consequence,

parents from higher classes are more likely to demand the general track. “Objective” performance measures such as average mark on the *brevet* and previous grade repetition in lower secondary school are indicators that parents use to evaluate the child’s chances of success (*p*) and to assess the likelihood that the staff meeting will propose the general track (*l*). A regression that takes into account both measures – parents’ subjective assessment and objective measures such as marks – can indicate whether they have independent effects on a family’s school track request. I suggest that the direct effects of student’s mark and previous grade repetition which remain after controlling for parents’ subjective performance assessment represent families’ evaluation of the likelihood that the staff meeting accepts an LGT-request (*l*). The direct effect of parents’ assessment indicates their subjective evaluation of the student’s chances to succeed in LGT (*a*).

Indeed, as Model 1 in Table 20 shows, all three performance-measures – parents’ performance assessment, marks, grade repetition – have highly significant effects. Holding constant social class, the control variables and the core decision-making parameters, the *average* probability to demand LGT increases by 6 percentage points with every additional point of subjectively assessed performance (on the 4-point scale); it augments by 5 percentage points when student’s mark increases by one point (on the 20-point-scale). Moreover, the corresponding average probability is 15 percentage points lower when the student has repeated grades as when he has not experienced grade repetition. The explanatory power of the model increases sharply as the AIC of 7018 (Model 4, Table 19) is reduced to 5718 (Model 1, Table 20).

Table 20 Social class effects on family's school track request (LGT vs. LPA): Test of the impact of the parameter 1 (results of binary logistic regression; AMEs)

	Model 1	Model 2	Model 3	Model 4	Model 5
<i>Social class</i> (Ref. EGPVI, VIIa)					
EGPI	0.193 ^{***} (0.01)	0.143 ^{***} (0.02)	0.182 ^{***} (0.01)	0.190 ^{***} (0.01)	0.139 ^{***} (0.02)
EGPII	0.136 ^{***} (0.01)	0.088 ^{***} (0.01)	0.125 ^{***} (0.01)	0.132 ^{***} (0.01)	0.083 ^{***} (0.01)
EGPIII, V	0.068 ^{***} (0.01)	0.051 ^{***} (0.01)	0.063 ^{***} (0.01)	0.066 ^{***} (0.01)	0.048 ^{***} (0.01)
EGPIVc, VIIb	0.011 (0.02)	-0.011 (0.02)	0.005 (0.02)	0.010 (0.02)	-0.013 (0.02)
EGPIVa, IVb	0.093 ^{***} (0.01)	0.071 ^{***} (0.01)	0.088 ^{***} (0.01)	0.091 ^{***} (0.01)	0.069 ^{***} (0.01)
French origin	-0.045 ^{***} (0.01)	-0.046 ^{***} (0.01)	-0.045 ^{***} (0.01)	-0.045 ^{***} (0.01)	-0.046 ^{***} (0.01)
Private school	-0.020 [*] (0.01)	-0.022 [*] (0.01)	-0.022 [*] (0.01)	-0.022 [*] (0.01)	-0.024 ^{**} (0.01)
ZEP-school	-0.022 (0.01)	-0.018 (0.01)	-0.022 (0.01)	-0.023 (0.01)	-0.020 (0.01)
<i>City size</i> (Ref. >200,000 inh., Paris)					
< 5,000 inhabitants	-0.090 ^{***} (0.01)	-0.090 ^{***} (0.01)	-0.091 ^{***} (0.01)	-0.091 ^{***} (0.01)	-0.091 ^{***} (0.01)
5,000-20,000	-0.055 ^{***} (0.01)	-0.054 ^{***} (0.01)	-0.056 ^{***} (0.01)	-0.055 ^{***} (0.01)	-0.055 ^{***} (0.01)
20,000-200,000	-0.037 ^{***} (0.01)	-0.036 ^{***} (0.01)	-0.037 ^{***} (0.01)	-0.036 ^{***} (0.01)	-0.037 ^{***} (0.01)
Parents' performance assessment (<i>p</i>)	0.061 ^{***} (0.01)	0.060 ^{***} (0.01)	0.060 ^{***} (0.01)	0.060 ^{***} (0.01)	0.059 ^{***} (0.01)
Number of siblings (<i>C</i>)	-0.008 ^{**} (0.00)	-0.007 ^{**} (0.00)	-0.007 [*] (0.00)	-0.008 ^{**} (0.00)	-0.007 [*] (0.00)
No parent working (<i>C</i>)	-0.011 (0.01)	0.002 (0.01)	-0.004 (0.01)	-0.009 (0.01)	0.006 (0.01)
<i>Educational motivation</i> (<i>c</i> * <i>SD</i>) (Ref. None)					
Intermediate	0.066 ^{***} (0.01)	0.065 ^{***} (0.01)	0.063 ^{***} (0.01)	0.065 ^{***} (0.01)	0.063 ^{***} (0.01)
High	0.139 ^{***} (0.01)	0.129 ^{***} (0.01)	0.135 ^{***} (0.01)	0.137 ^{***} (0.01)	0.126 ^{***} (0.01)
Indicators of parameter <i>l</i> : Mark	0.051 ^{***} (0.00)	0.050 ^{***} (0.00)	0.051 ^{***} (0.00)	0.051 ^{***} (0.00)	0.050 ^{***} (0.00)
Previous grade repetition	-0.151 ^{***} (0.01)	-0.148 ^{***} (0.01)	-0.149 ^{***} (0.01)	-0.152 ^{***} (0.01)	-0.147 ^{***} (0.01)
<i>Parental education</i> (Ref. lower)					
Intermediate		0.042 ^{***} (0.01)			0.037 ^{***} (0.01)
Higher		0.083 ^{***} (0.01)			0.074 ^{***} (0.01)
Parents' evenings			0.033 ^{**} (0.01)		0.026 [*] (0.01)
Parents' initiation of meetings			0.018 [*] (0.01)		0.013 (0.01)
Teachers' initiation of meetings			-0.018 [*] (0.01)		-0.019 [*] (0.01)
PA-membership			0.034 ^{***} (0.01)		0.025 [*] (0.01)
<i>Opinion on parent-teacher relation</i> (Ref. Better not meet)					
Meet when problem				0.003 (0.01)	-0.005 (0.01)
Meet frequently				0.023 [*] (0.01)	0.009 (0.01)
Knowledge of right to reject				0.009 (0.01)	0.005 (0.01)
<i>AIC</i>	5717.8	5671.7	5691.5	5712.7	5657.2

Note: N=9002; AME=average marginal effect; SE=standard error adjusted for school-level clustering; * p<0.05; ** p<0.01; ***p<0.001. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

This result yields that “the objective part” of the primary effects has strong independent effects on families’ educational choices. I infer that this net effect emerges because families use marks to assess the probability that the school accepts their request. At the same time this effect indicates the likelihood that the family will have to reject. Families assume that – regardless of their personal opinion on their child’s abilities and chances of succeeding in general upper secondary education – the teachers will be more likely to accept an LGT-request if the child has good marks (and has not repeated grades). Since the “objective” performance strongly depends on social class, families’ evaluation of the chances that the school accepts their request contributes to the generation of social class differentials in families’ school track choices. This reasoning is further supported by the major decrease of the social class effects. For instance, for EGP I the AME of 0.26 (Model 4, Table 19) decreases to an AME of 0.19 (Model 1, Table 20) when marks and previous grade repetition are taken into account.

Model 2 additionally contains parents’ cultural capital operationalized through parents’ education. As expected, the social class effects decrease to some extent and parental education has a highly significant positive effect on the likelihood that a family opts for LGT instead of LPA. This result yields various explanations. First, as suggested by the theoretical model, parents take into account their cultural capital to assess the likelihood that the staff meeting will accept their request. More specifically, they assume that teachers know whether they have the abilities and educational knowledge to meet the school’s standards school and will consider these capacities when they make the school track proposition. Since parents from higher classes are better equipped with the relevant cultural resources, they are more confident that the staff meeting will accept their request and hence they are more likely to demand the general track. Moreover, I suggest that parents with higher educational attainment take into account their ability to persuade the headmaster and the recall meeting in case they have to reject.¹²⁵

Most types of parental involvement have positive significant effects on a family’s school track request (Model 3, Table 20). On average, the likelihood that parents who attend parents’ evenings demand the general track is 3 percentage points higher than that of parents who are not involved in that way (holding constant social class, the core parameters and the

¹²⁵ As opposed to the basic assumptions of the theoretical model developed in Chapter 5, the mediating effect of parental education could also indicate that *class-specific norms and values* shape families’ educational decisions: Parents from higher social classes were socialized in the higher educational system where they internalized the general value of education and norms such as “children from higher classes have to attend higher education” or the like (see Subchapter 3.1.1 on the original theory by Bourdieu).

control variables). The effect is significant at an intermediate level ($p < 0.01$). The respective average probability difference is 1.8 percentage points for parents' initiation of meetings ($p < 0.05$). Membership in a parent association (PA) has a positive marginally significant effect, too. By contrast, teachers' initiation of meetings has a negative weakly significant effect that indicates that parents with lower educational aspirations (i.e. parents who do not request LGT) are not initiating meetings by themselves and, thus, are invited by the teachers.

Model 4 alternatively takes into account parents' opinion on parent-teacher relationships and their knowledge of their right to reject. It appears that parents who think that they should meet teachers frequently are slightly more likely to request LGT than parents who think that they should not bother the teachers. Knowledge of the rejection right has no significant effect. At least, the coefficient has the expected sign. The social class effects are less reduced than when parental education or involvement is factored in (see Model 2 and 3). Model 5 contains all the variables that represent parents' cultural capital and involvement: The effects of parental education and involvement decrease and the small effect of parents' opinion on parent-teacher relationships becomes insignificant. Still, parental education has a highly significant positive effect and attendance at parents' evenings and PA-membership have a weakly significant positive impact.¹²⁶

In sum, the positive effects could indicate that parents take into account their involvement when they make educational decisions: they think that the staff meeting will be more willing to accept their request because they meet the school's standards, i.e. they are involved in their children's schooling. Also, this result could show that parents were more involved because they planned to make a higher educational choice. In other words, parents with high educational aspirations, i.e. parents who plan to demand the general track, start early to *prepare* for the teachers' decision by being involved and consider this effort when they take the decision.¹²⁷

¹²⁶ An analysis that is not presented also takes into account being parent representative in the staff meeting. It reveals that this involvement kind has no significant positive effect, even when PA-membership is not included in the regression. Results are available on request from the author.

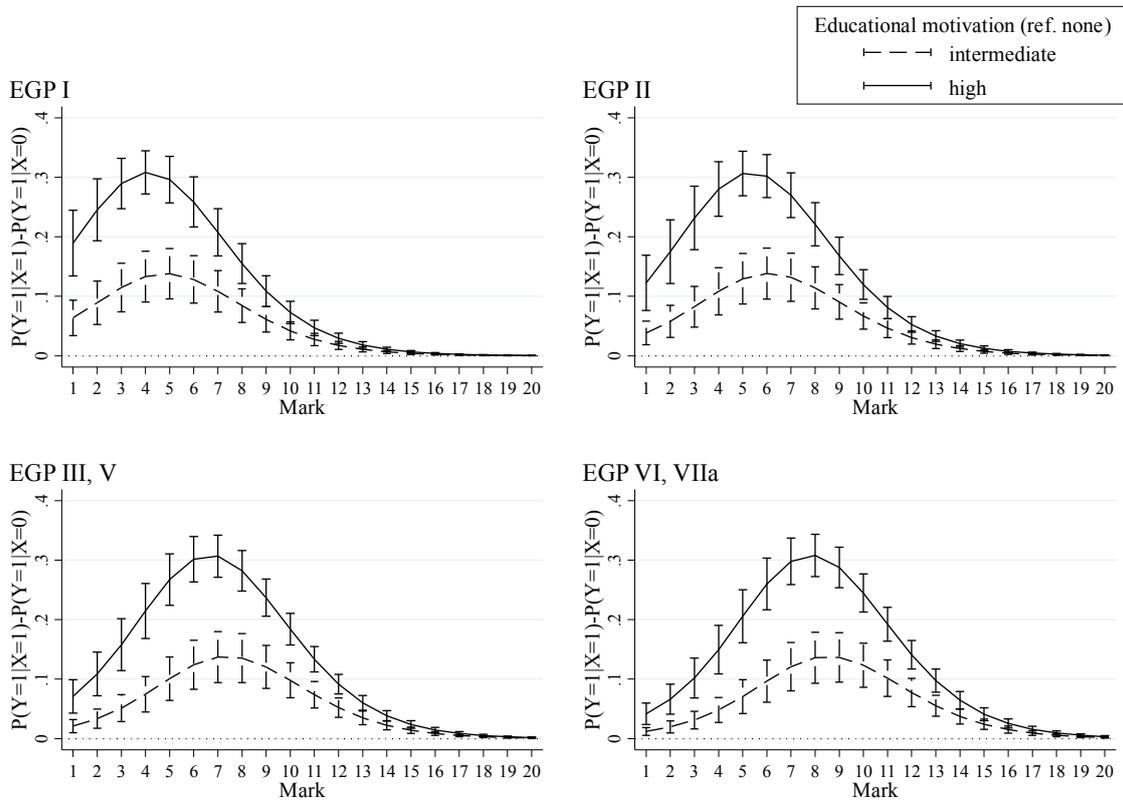
¹²⁷ One could criticize that an unobserved effect of planned educational decision on involvement confounds the observed effect of involvement on families' requests. Therefore, I could not surely conclude that families take into account their involvement to assess the likelihood that the staff meeting accepts their request. However, even if this is the case, the result still strongly supports an important theoretical assumption: Families who have higher educational aspirations put more effort in meeting the standards of the school because the staff meeting makes a virtually binding proposition. In turn, this implies that the institutional circumstances make families get more involved. Moreover, if families planning to demand LGT get more involved, they are very likely to even more consider their additional effort when they make their school track choice.

With regard to the explanation of the social class effects, the results of a KHB-application to the regression that takes into account all additional determinants (Model 5) reveals that 67 to 76 per cent of the total effects of EGP I, II and III and V are due to the core decision-making model *and* the parameters that shall represent families' evaluation of the likelihood that the staff meeting accepts their demand and families' capacities to possibly reject the proposition (Table A14). While the *indirect effect* is only marginally driven by social class differentials in parental involvement, it is caused to larger extents by marks, parental education and educational motivation (not shown in the table). Basically, these results support Hypothesis H3. However, a considerable part of the social class effects on families' requests remains unexplained. This remaining social class effect could be due to an insufficient operationalization of the parameter *l* and the other "core" parameters. Moreover, still other unobserved mechanisms could be at work.

The theoretical model on family's decision-making yields several assumptions on interaction effects of the parameters. *Hypotheses H4 to H4c* formulate these assumptions. As predicted probabilities vary depending on the values of the explanatory variables, I first address these hypotheses with conditional effect plots that are based on regression models that do *not* include interaction terms. Generally, these plots show when students' marks are above the average, subjectively expected chances of success, costs, educational motivation and indicators of parents' cultural capital and involvement have almost no effects. However, when students' performance is below the average level, most of these factors have a considerable impact on the likelihood that a family still requests LGT. In the following I briefly present three examples.

First, as *Hypothesis H4a* expects, *educational motivation* has larger effects when students' performance is low – i.e. when the staff meeting is likely to not accept an LGT-request – than when students' marks are relatively good (Figure 12). Moreover, as a family's social class increases, the maximal effect of educational motivation, i.e. the "bump" in the curve, occurs at even lower mark-levels. This indicates that families who severely need their children to attend LGT are willing to request LGT even when the risk that the staff meeting does not accept this request is very high.

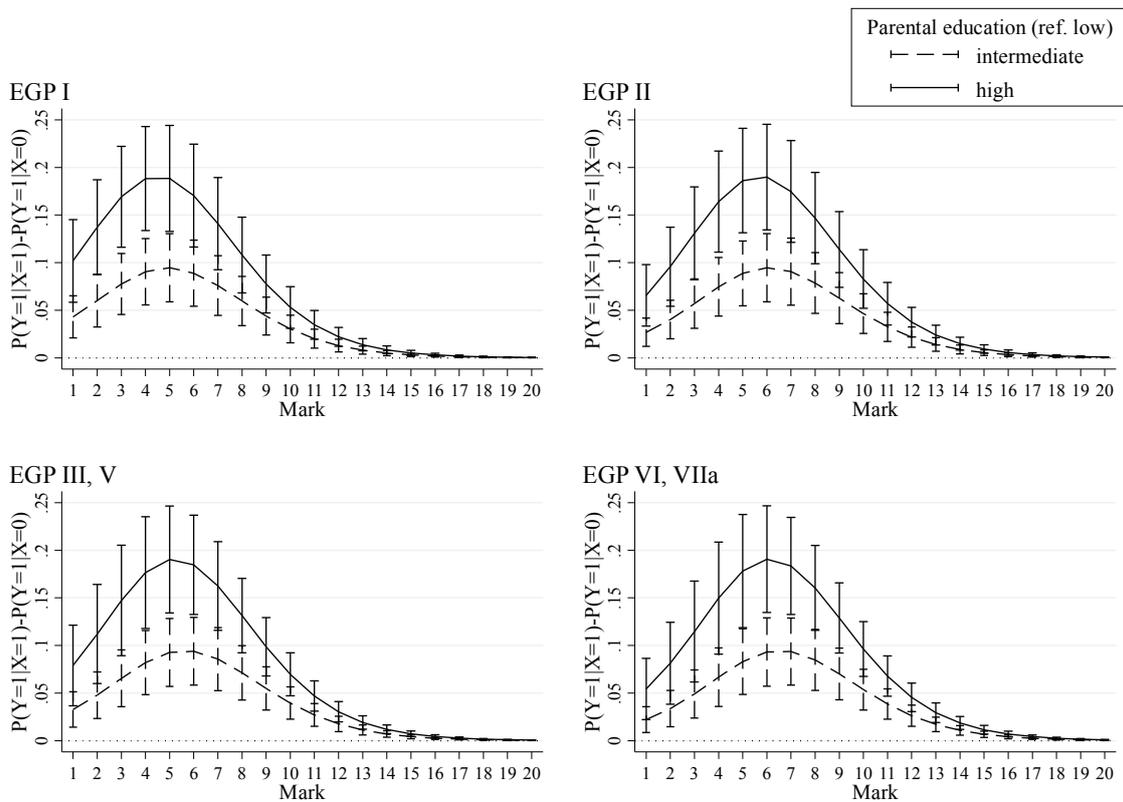
Figure 12 Discrete change effects of educational motivation on family's school track request (LGT vs. LPA) by mark and social class



Note: LGT=general track, LPA=vocational track; estimates obtained from Model 1 in Table 20; probabilities are calculated for students of French origin who have not repeated grades, attending a public school that is located in a large city or Paris and not in a ZEP, having an average number of siblings, parents rate them as good students (score 3) and they have at least one working parent; 95%-confidence intervals. *Source:* Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Second, as *Hypothesis H4c* expects, *parental education* makes no difference when students have very good marks (Figure 13). By contrast, if students have marks in the middle- and lower range and therefore the families cannot be sure that the staff meeting will accept an LGT-request, parents with higher education are considerably more likely to request the general track than parents with lower educational attainment. According to the theory, this effect is due to the fact that parents with cultural capital enabling them to meet schools' standards are more confident that the staff meeting will accept their LGT-request. Moreover, parents with these cultural resources are more willing to reject and hence they are more likely to take the risk of having their request not accepted.

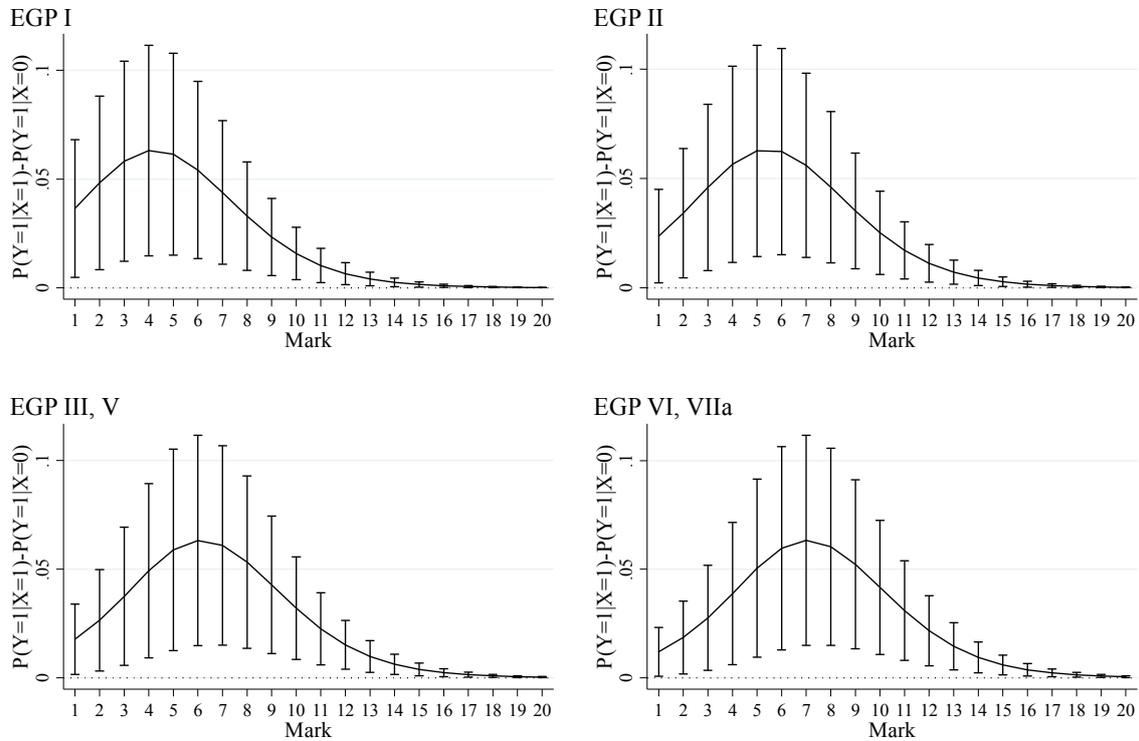
Figure 13 Discrete change effects of parental education on family's school track request (LGT vs. LPA) by mark and social class



Note: LGT=general track, LPA=vocational track; estimates obtained from Model 2 in Table 20; probabilities are calculated for students of French origin with parents with intermediate educational motivation, having not repeated grades, attending a public school that is located in a large city or Paris and not in a ZEP, having an average number of siblings and at least one working parent; parents rate the student's performance as good (score 3); 95%-confidence intervals. *Source:* Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Third, also PA-membership appears to have considerable effects only when students' marks are relatively low (Figure 14). Even though the effects are of small size, this result provides some support of *Hypothesis H4c*, which assumes that families take into account their involvement when the risk is high that the staff meeting will not accept their LGT-request. According to the theory, families consider their involvement because they think that the staff meeting will reward their additional effort. In the case of PA-membership, parents factor in this specific involvement because parent representatives in the staff meetings belong to these associations, too, and act in the interests of the other members. Possibly, these parents are themselves parent representatives in the staff meetings and hence they will be able to directly influence teachers' decision.

Figure 14 Discrete change effects of PA-membership on family’s school track request (LGT vs. LPA) by mark and social class



Note: LGT=general track, LPA=vocational track; estimates obtained from Model 3 in Table 20; probabilities are calculated for students of French origin with parents with intermediate educational attainment and intermediate educational motivation, having not repeated grades, attending a public school that is located in a large city or Paris and not in a ZEP, having an average number of siblings and at least one working parent; parents rate the student’s performance as good (score 3) and are attending parents’ evenings; 95%-confidence intervals. *Source:* Panel national 1995 d’élèves du second degré, Ministère de l’Éducation nationale, DPD; own calculations.

Up to here, I have addressed Hypotheses H4 to H4c by means of “simple” conditional effect plots that are not based on regressions including interaction terms. Now, to directly examine the interactions postulated by Hypotheses H4 to H4c, I run logistic regressions of family’s school track request (LGT vs. LPA) that include the respective interaction terms. If the inclusion of the interaction term causes at least a small increase of the model fit, i.e. a decrease of the AIC-value, I further analyze the interaction with conditional effect plots that are based on the specific regression model. Table A15 presents results of regression models that include interaction terms that slightly improve the model fit of the respective regression models.¹²⁸

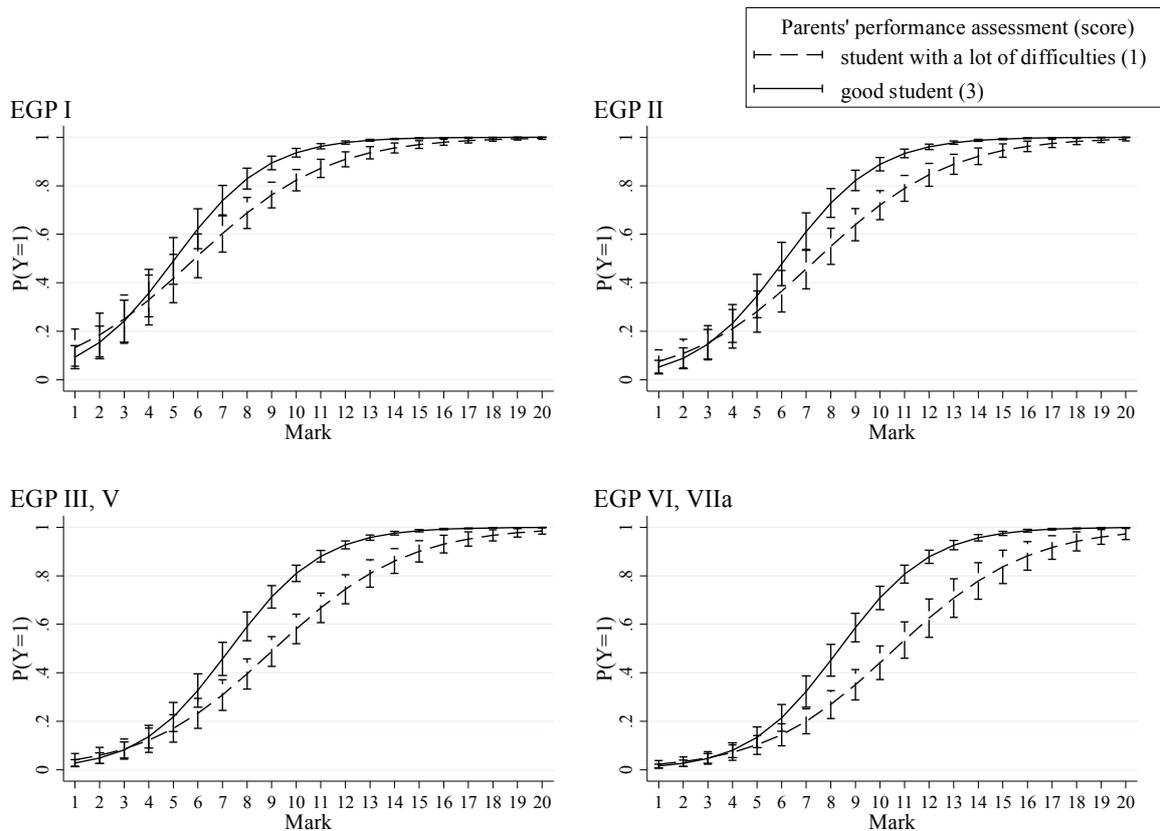
¹²⁸ Table A15 does not contain a regression model that takes into account an interaction of marks and parental education since including this interaction in the model decrease its explanatory power. The results are available on request.

Figure 15 presents predicted probabilities obtained from a regression that takes into account an interaction of marks and parents' subjective performance assessment (Model 1 in Table A15). The predicted probabilities hold for French students whose parents indicated that they have an intermediate educational motivation, who are enrolled in a public school that is located in Paris or a larger city and that is not a ZEP-school. To keep the figure clearer, predicted probabilities are only presented for students whose parents rated them as "good student" (i.e. a score of 3) and "student with a lot of difficulties" (i.e. a score of 1). This interaction tests the multiplicative relation between p and l : families who know that the staff will accept their LGT-demand are even more concerned with evaluating their children's chances of success since these chances ultimately determine whether the family can preserve its social status.

Figure 15 provides some evidence in favor of this assumption and hence of *Hypothesis H4*. Indeed, the distance between the curves is larger in the higher levels of the marks-scale. If a student has low marks there is no difference and, although the curves move closer as marks increase, they are still distant. Nevertheless, the distance is the largest when students have marks in the middle range. This is due – to some extent – to the logistic function of the probabilities: Lowess smoother reveal that especially for EGP II, EGP III and V and EGP VI and VIIa the effect of performance assessment (i.e. the distance between the curves) strongly increases as student's marks increase and is the largest when students' marks are around 15.

Further, Figure 15 shows that the effect of parents' performance assessment seems largest for the working class. This result is also supported by lowess smoother and in line with the theory: Since families from lower classes have less to lose from sending their child to the vocational track, they must be really persuaded of their child's likelihood of success to request the general track, especially when the chance that the staff meeting proposes the general track is uncertain. Moreover, even when the likelihood that the staff meeting accepts an LGT-request is high, parents' subjective assessment of their child's chances of success has a greater impact because they have to factor in the costs of education. Overall, given a student has a mark of 11 and the family thinks he is a good student, still the likelihood that a working-class family demands LGT is 80 per cent while the corresponding likelihood for a higher service class family is more than 95 per cent.

Figure 15 Interaction effect of mark and parents' performance assessment on family's school track request (LGT vs. LPA) by social class, predicted probabilities



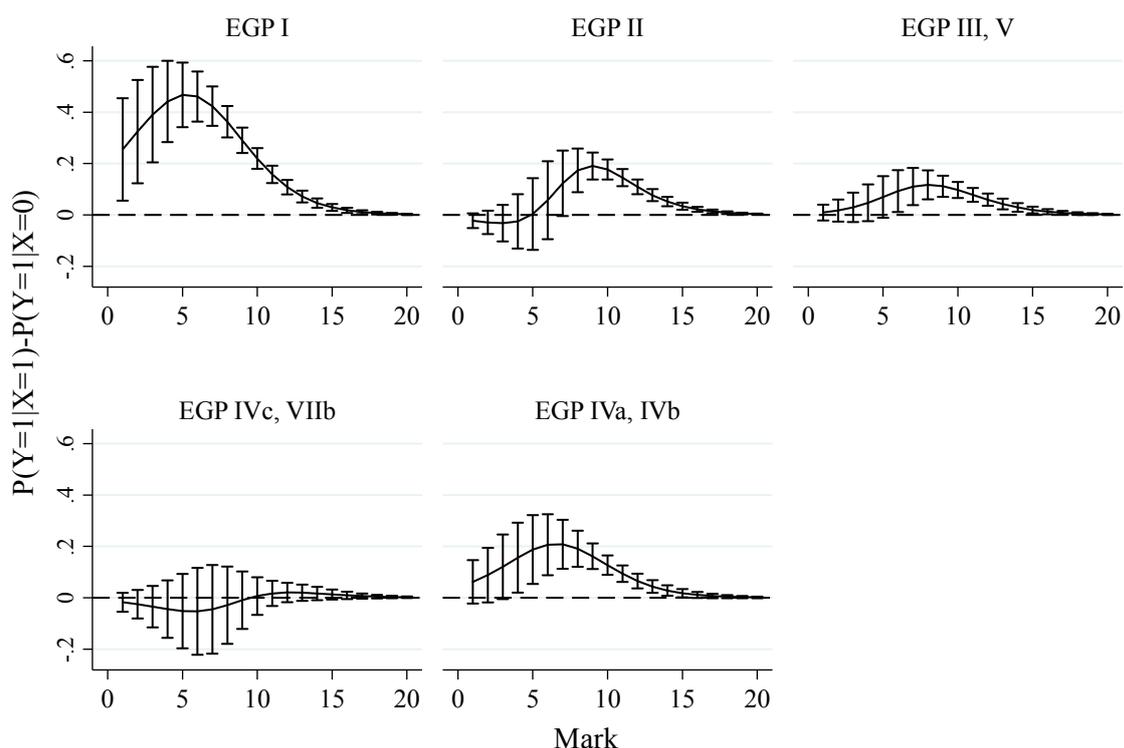
Note: LGT=general track, LPA=vocational track; estimates obtained from Model 1 in Table A15; probabilities are calculated for students of French origin with parents with intermediate educational motivation, having not repeated grades, attending a public school that is located in a large city or Paris and not in a ZEP, having an average number of siblings and at least one working parent; 95%-confidence intervals. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Figure 16 addresses the interaction of social class and the likelihood that the staff accepts an LGT-request. This likelihood is operationalized via students' average marks on the *brevet*. This analysis is a more general test of *Hypothesis H4a*, which assumes that the effect of the educational motivation increases as the likelihood that the staff meeting accepts an LGT-request decreases. That is to say, families who have a lot to lose from not having their children attend the general track – i.e. higher-class families – are significantly more likely to request the general track even though the risk is high that the staff meeting will not accept their request. By contrast, families from lower classes will not demand the general when their children have low marks because they would experience less or no costs of status decline at all if their child attends the vocational track.

Figure 16 provides evidence that supports this assumption. The higher the social class, the stronger are the discrete change effects when students' marks are in the middle and lower range. The effect is most striking for EGP I: Given a student has an average mark of 5, the

predicted probability that his family still requests LGT is almost 50 percentage points higher than when the family belongs to the working class (EGP VI, VIIb). Holding constant parents' performance assessment at 1 (poor performance) reduces the discrete change effects at the very low mark-levels (see Figure A3 in the appendix).

Figure 16 Interaction effect of mark and social class on family's school track request (LGT vs. LPA); parents' performance assessment held constant at 3; discrete change effects (reference: EGP VI, VIIa)

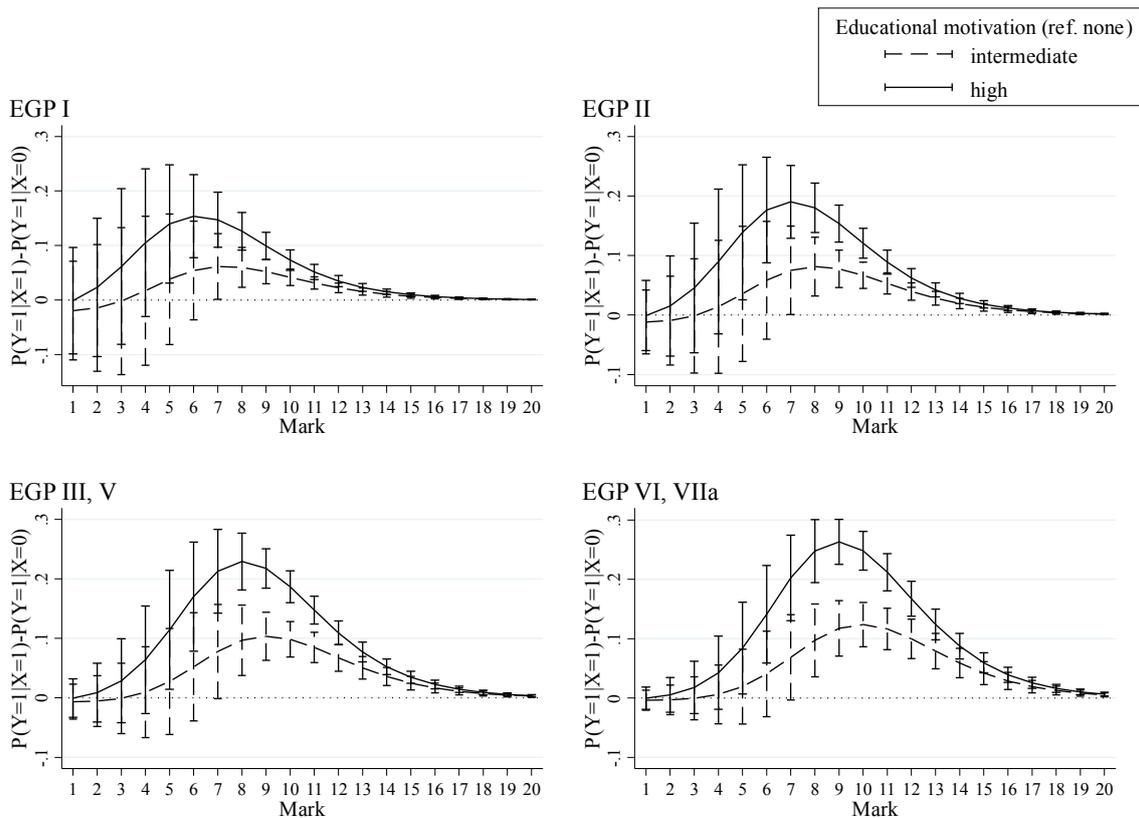


Note: LGT=general track, LPA=vocational track; estimates obtained from Model 2 in Table A15; probabilities are calculated for students of French origin with parents with intermediate educational motivation and who think the child is a “good student”, having not repeated grades, attending a public school that is located in a large city or Paris and not in a ZEP, having an average number of siblings and at least one working parent; 95%-confidence intervals. *Source:* Panel national 1995 d’élèves du second degré, Ministère de l’Éducation nationale, DPD; own calculations.

To directly investigate whether it is a higher level of educational motivation that causes families from higher social classes to take the risk of demanding LGT even though the child is poorly performing, I analyze an interaction between mark and educational motivation (Figure 17). The predicted probabilities hold for the usual student. As expected, the conditional effect plots reveal that educational motivation has its largest effects when a student has marks in the lower and middle range. In line with the theory, this means that families who have a high educational motivation are more likely to request the general tack although the risk is high

that the staff meeting will not accept their request. The effect of educational motivation is stronger for lower than for higher social classes. This could be due to the fact that lower-class families have less economic resources to account for the costs of sending their child to the general track and therefore they need more educational motivation to take a risky decision. However, since the costs-parameter generally has only a minor impact, other social class differences must be at work. It could be that the educational-motivation variable is not capable of capturing the full impact of families' need to have their child attend the general track and thus the stronger effect of educational motivation for working-class families still indicates that families who have less to lose from not sending their child to LGT need more educational motivation to take a risky demand. To detect this, I would need a better educational motivation-measure.

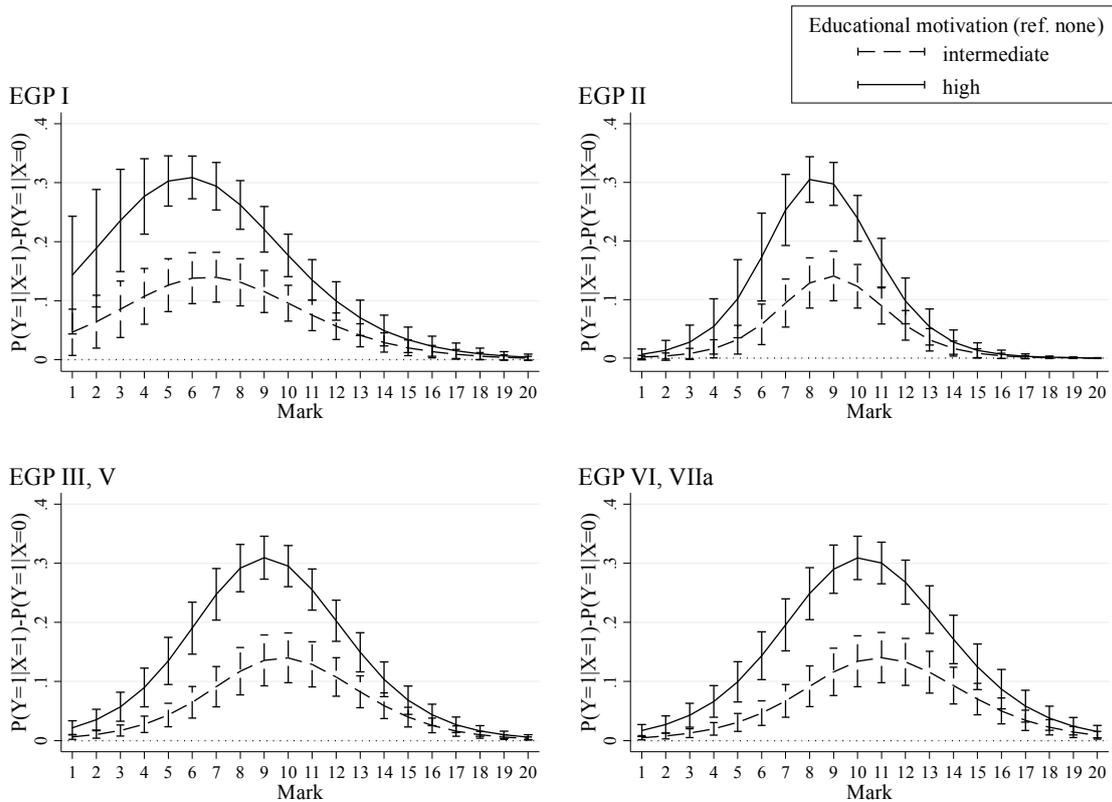
Figure 17 Interaction effect of mark and educational motivation on family's school track request (LGT vs. LPA) by social class; discrete change effect, performance assessment held constant at 3



Note: LGT=general track, LPA=vocational track; estimates obtained from Model 3 in Table A15; probabilities are calculated for students of French origin with parents who rate their children as “good student” (score 3), attending a public school located in a large city or Paris and not in a ZEP, having an average number of siblings and at least one working parent; 95%-confidence intervals. Source: Panel national 1995 d’élèves du second degré, Ministère de l’Éducation nationale, DPD; own calculations.

Hypothesis H4b postulates a three-way interaction between likelihood of success (p), educational motivation ($c \cdot SD$) and the probability that the staff meeting accepts an LGT-request (l): If the staff meeting is relatively likely to propose LGT but the family thinks the child has low chances of success, the effect of educational motivation is stronger than if the family thinks the child has high chances of success. Figure 18 corresponds to Figure 17 but parents’ performance assessment was held constant at “low”. A comparison of the effect of the educational motivation in both figures provides some support for *Hypothesis H4b*: When parents rate their children’s performance as low (Figure 18), their educational motivation has a greater impact than when their educational motivation is relatively high (Figure 17). However, this difference appears rather in the middle range of marks, i.e. when it is unsure whether the staff meeting will propose LGT, than in the higher range. This result does not support the hypothesis.

Figure 18 Interaction effect of mark and educational motivation on family's school track request (LGT vs. LPA) by social class; discrete change effects, performance assessment held constant at 1

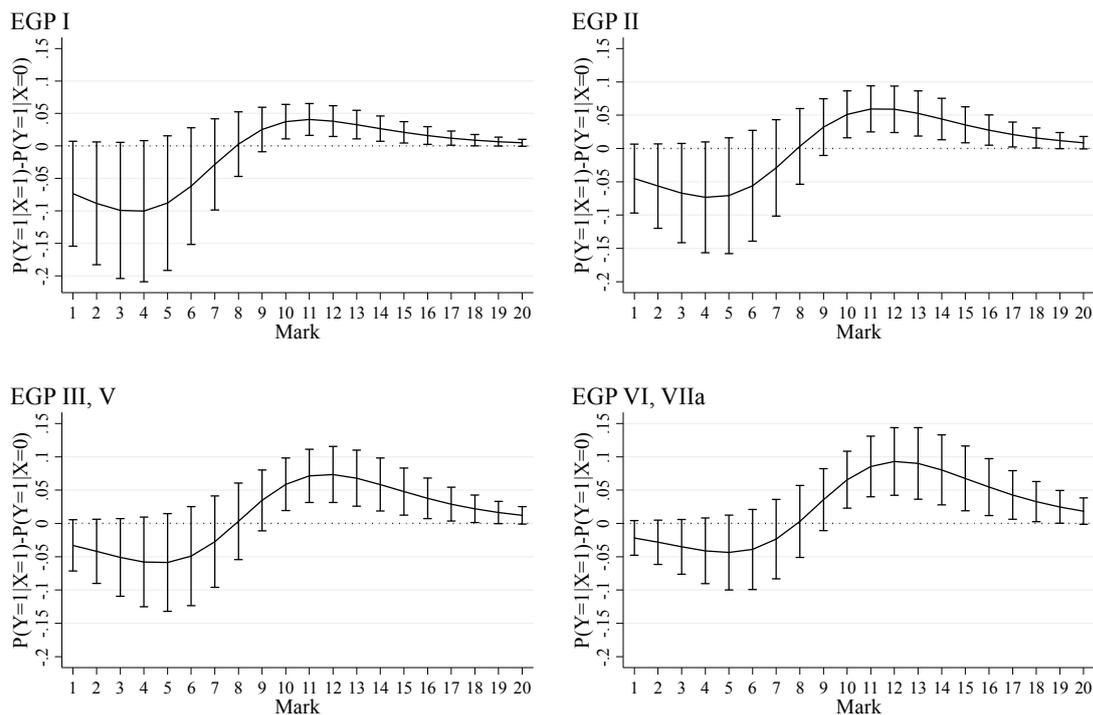


Note: LGT=general track, LPA=vocational track; estimates obtained from Model 3 in Table A15; probabilities are calculated for students of French origin with parents who rate their children as “student with a lot of problems” (score 1), having not repeated grades, attending a public school that is located in a large city or Paris and not in a ZEP, having an average number of siblings and at least one working parent; 95%-confidence intervals. *Source:* Panel national 1995 d’élèves du second degré, Ministère de l’Éducation nationale, DPD; own calculations.

The theoretical model further yields the assumption that parents who have the cultural capital to meet schools’ standards and to bear the costs of rejection (i.e. talk to the headmaster and recall meeting) are more likely to demand LGT even though the risk is high or unclear that the staff meeting will not accept their demand (*Hypothesis H4c*). Graphical analyses that correspond to those presented before reveal that there is hardly a significant interaction of marks and parental education and hence do not support *Hypothesis H4c*. This hypothesis also comes with the assumption that parents’ direct involvement in school has stronger effects on families’ requests when the child is poorly performing. The mechanism behind this effect could be, either, that they think that their effort increases the probability that the staff will accept their demand. Or, parents of students with relatively low performance early prepare for the dialogue by being involved. Conditional effect plots examining the interaction between marks and attendance at parents’ evenings, parents’ initiation of meetings and PA-

membership reveal only one relatively weak interaction: When parents' performance assessment is held constant at 1, attendance at parents' evenings has a small significant effect when marks are in the middle range (Figure 19). By contrast, holding constant parents' performance assessment at 3 (i.e. good student), I find no significant interaction effect (Figure A4). This result seems to indicate that parents only take into account their attendance at parents' evenings when they are worried about their child's chances of success *and* the child's marks are in the middle range indicating that the staff may not accept an LGT-demand. Parents who think their child is a good student do not take into account their involvement, even when the child's marks are relatively low and the risk is high that the staff would reject their demand. This result contradicts the theory.

Figure 19 Interaction of marks and attendance at parents' evenings on family's school track request (LGT vs. LPA) by social class; discrete change effects, performance assessment held constant at 1



Note: LGT=general track, LPA=vocational track; estimates obtained from Model 4 in Table A15; probabilities are calculated for students of French origin with parents with intermediate educational motivation, having not repeated grades, attending a public school that is located in a large city or Paris and not in a ZEP, having an average number of siblings and at least one working parent; 95%-confidence intervals. *Source:* Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Other conditional effect plots that graphically examine interactions were drawn for varying performance assessments and varying educational motivation-levels (the plots are not shown). They provide very similar results: There is hardly any significant interaction between marks and attendance at parents' evenings when parents' performance assessment is held constant at 3, and between marks and parents' initiation of meetings or PA-membership. Therefore, I conclude that parents do not *even more* consider their involvement when the risk is high that the staff meeting will not accept their LGT-request. Or, they do not become involved only when their children have poor marks.

8.3.3 FAMILY'S REJECTION DECISIONS

Only families whose school track request was not accepted by the staff meeting are entitled to reject the staff meeting's proposition. Therefore, the analysis of families' rejection decision is based on a sample that consists only of families whose requests do not correspond to the propositions by the staff meeting. More specifically, the sample contains only families who demanded the general track but did not receive an LGT-proposition by the staff meeting. Table A16 in the appendix lists means of the variables used in the analysis of families' rejection decisions by social class. Table 21 presents the results of a logistic regression of family's decision to reject and attend the talk with the headmaster. Model 1 contains only social class and the control variables. The effect of EGP I is significant at the 1 per cent-level and the EGP II-effect is significant at the 5 per cent-level. Corresponding AMEs indicate that, on average, the likelihood that higher service class families reject is 13 percentage points higher than the likelihood that working-class families reject. This result provides evidence in favor of *Hypothesis H5*.

Model 2 tests *Hypothesis H5a*, which assumes that educational motivation and parents' cultural capital mediate the effect of social class. This hypothesis follows from the assumption that parents who have a lot to loose (i.e. who will experience status decline) from not sending their child to the general track are willing to bear the costs of rejection. Moreover, parents who are equipped with cultural resources that facilitate their dealing with school staff are more willing to meet the headmaster. In fact, only including parental education produces an increase of the model fit; educational motivation does not augment the explanatory power of the model. For this reason, Table 21 presents only a regression model that contains parental education (Model 2).

The results obtained by Model 2 provide some evidence in favor of *Hypothesis H5a* since the effects of EGP I and II considerably decrease and become insignificant. Moreover,

the model fit increases slightly and the effect of intermediate parental education is significant at a low level ($p < 0.05$). Other than one would expect, it is not higher parental education but intermediate education that has a significant effect. The AME tells that parents with intermediate education are, on average, almost 10 percentage points more likely to reject than parents with lower education.

Table 21 Social class effects on family's rejection decision and mediating effect of parental education (results of binary logistic regression; AMEs)

	Model 1		Model 2		Model 3	
	AME	(SE)	AME	(SE)	AME	(SE)
<i>Social class</i> (Ref. EGPVI, VIIa)						
EGPI	0.126**	(0.05)	0.069	(0.06)	0.117*	(0.05)
EGPII	0.139*	(0.06)	0.085	(0.06)	0.135*	(0.06)
EGPIII, V	0.074	(0.04)	0.047	(0.05)	0.070	(0.04)
EGPIVc, VIIb	-0.059	(0.10)	-0.103	(0.10)	-0.063	(0.10)
EGPIVa, IVb	0.068	(0.05)	0.041	(0.05)	0.066	(0.05)
French origin	-0.062	(0.04)	-0.071*	(0.04)	-0.063	(0.04)
Private school	0.036	(0.04)	0.030	(0.04)	0.037	(0.04)
ZEP-school	0.078	(0.06)	0.091	(0.06)	0.081	(0.06)
<i>City size</i> (Ref. >200,000 inh., Paris)						
< 5,000 inhabitants	0.003	(0.05)	0.002	(0.05)	0.006	(0.05)
5,000-20,000	-0.011	(0.04)	-0.003	(0.04)	-0.010	(0.04)
20,000-200,000	0.019	(0.04)	0.020	(0.04)	0.019	(0.04)
<i>Parental education</i> (Ref. lower)						
Intermediate			0.095*	(0.04)		
Higher			0.089	(0.05)		
Staff meeting's proposition: GR (1) vs. LPA (0)					0.031	(0.03)
<i>N</i>	982		982		982	
<i>AIC</i>	1263.9		1261.2		1264.9	

Note: AME=average marginal effect; SE=standard error adjusted for school-level clustering; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Model 3 in Table 21 includes a variable that indicates the staff meeting's proposition (GR vs. LPA) instead of parental education. This analysis tests whether families accept grade retention as a compromise and do not reject such proposition or whether it motivates families to reject. Taking into account staff meeting's proposition reduces the model fit and its effect is insignificant. Still, the sign of the coefficient reveals that grade retention increases the likelihood of rejection. Moreover, the social class effects are reduced and become less significant. This indicates that families from higher social classes are more likely to receive a grade retention proposition but tend to not accept this compromise.

Finally, Table 22 presents a bivariate analysis of the association between families' social origin and their decision to reject a second time, i.e. to reject the headmaster's decision.

There are 284 families in the *basic sample* that rejected the staff meeting's proposition, attended the talk with the headmaster and did *not* get the school track decision they initially had requested. These families are entitled to reject a second time and to thereby initiate the recall meeting. A weak relationship between social class and the decision to reject a second time appears: Spearman's rho and Kendall's tau beta indicate a weak correlation that is significant at a marginal level ($p < 0.05$). While 82 per cent of EGP I-families reject, 72 per cent of EGP II-families, 73 per cent of the families from EGP III and V and 61 per cent of working class families (VI, VIIa) do so. These results provide support in favor of *Hypothesis H6*. However, since the absolute numbers are very small, these results must be interpreted with caution.

Table 22 Social class and family's second rejection (frequencies; percentages in parantheses)

EGP-class	I	II	III, V	IVc, VIIb	IVa, IVb	VI, VIIa	Total
Not reject	13 (18.06)	9 (28.13)	24 (27.27)	1 (33.33)	12 (31.58)	20 (39.22)	79 (27.82)
Reject	59 (81.94)	23 (71.88)	64 (72.73)	2 (66.67)	26 (68.42)	31 (60.78)	205 (72.18)
Total	72 (100)	32 (100)	88 (100)	3 (100)	38 (100)	51 (100)	284 (100)
<i>Spearman's rho</i>	0.151*						
<i>Kendall's tau beta</i>	0.136*						

Note: * $p < 0.05$. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

8.4 School's decisions

8.4.1 STAFF MEETING'S SCHOOL TRACK PROPOSITION

Henceforth, I analyze the impact of students' social class, students' school performance and families' school track requests on staff meetings' *school track propositions*. Table A17 in the appendix lists descriptive statistics of the variables used in the analysis of staff meetings' propositions. The differentiation by student's social class provides another bivariate test of the bridging hypotheses. Table 23 presents the results of nested logistic regressions of staff meetings' propositions (LGT vs. LPA) on student social class, the control variables, marks on the *brevet*, grade repetition and families' school track request. Model 1 reveals strong social class differentials in staff meetings' decisions and provides support for *Hypothesis H7*. For instance, on average, the probability that an EGP I-student is proposed the general track (LGT) instead of the vocational track (LPA) is almost 48 percentage points higher than the probability that a working-class students receives such a proposition; EGP II-students have a

corresponding average advantage of 39 percentage points and students from EGP-class III and V have one of almost 18 percentage points. French origin has no significant effect. Being enrolled in a private school and in a school that is located in the countryside has small but highly significant negative effects ($AME=-0.047$ and $AME=-0.051$; $p<0.00$). Being enrolled in a ZEP-school and attending a school located in a town with 5,000 to 20,000 inhabitants have negative effects at the intermediate significance level ($p<0.01$). The negative effect of attending schools in more rural regions could be driven by the fact that more places are available in vocational upper secondary schools in these areas, while bigger general upper secondary schools are located in urban regions.

Including student's school performance in terms of marks and previous grade repetition strongly decreases the social class differentials and the AIC-value (Model 2). The AME of EGP I is more than halved to 0.21 and the AME of EGP II is strongly reduced to 0.15 ($p<0.001$). On average, the likelihood that the staff meeting proposes the general track (instead of the vocational track) increases by 8 percentage points with every additional mark-point. The probability to be proposed LGT is 21 percentage points lower for students who have repeated at least one grade in lower secondary school as compared to students who have not repeated grades in that time.

Taking into account family's school track request strongly increases the model fit and makes most of the effects of the EGP-classes become insignificant (Model 3). Only very small positive effects of EGP I remain significant at the intermediate level ($p<0.01$). On average and controlling for performance, French origin, school type and city size, the probability that a student from EGP I is proposed LGT is 2 percentage points higher than the corresponding probabilities for working-class students. The effects of mark and repetition of grades are strongly reduced but remain highly significant. This indicates that the effects of social class and student performance are not fully driven by family's school track request. In other words, given the same request and performance, the staff meeting is more likely to propose LGT to students from EGP I (as compared to students from the working-class) and to students who have not repeated grades. Moreover, given the same request and holding constant the other variables, the likelihood to be proposed the general track increases as a student's mark increases. Finally, coefficients of family's school track requests show that the staff meeting follows families' demands: If a family did not request LGT but LPA, the

likelihood is significantly lower that the family is proposed LGT. The probability is, on average, 67 percentage points lower if the family requested the vocational track.¹²⁹

The results provide evidence in favor of *Hypothesis H8*, which assumes that the effect of student social class is largely mediated by performance and families' requests. According to the theoretical model developed in Chapter 5, a student's performance affects the staff meeting's proposition because teachers consider the performance to evaluate a student's chances of succeeding in LGT (i.e. the parameter a). The effect of a family's request on the staff meeting's propositions operates through teachers' evaluation of the likelihood that a family rejects (i.e. the parameter r). The small but significant remaining EGP I effect may emerge because the staff meeting either thinks that students from this class will be better supported by their parents and therefore have higher chances of success. Another explanation could be that families from the higher service class are more likely to reject and hence the school staff proposes LGT to them in order to prevent their rejection.

¹²⁹ The family request variable does not take into account grade retention requests (GR) since only 19 families to whom the staff meeting proposes LGT or LPA have demanded grade retention. That is to say, the sample for the analysis of staff meeting's decision between LGT and LPA would contain only 19 families (i.e. less than 2 per cent) who requested GR. To 15 of these families, staff meetings propose LPA and to 4 per cent they propose LGT.

Table 23 Social class effects on staff meeting's school track proposition (LGT vs. LPA); results of binary logistic regressions; AMEs

	Model 1 AME (SE)	Model 2 AME (SE)	Model 3 AME (SE)
<i>Social class</i> (Ref. EGPVI, VIIa)			
EGPI	0.476*** (0.01)	0.214*** (0.01)	0.021** (0.01)
EGPII	0.393*** (0.02)	0.153*** (0.01)	0.010 (0.01)
EGPIII, V	0.184*** (0.01)	0.073*** (0.01)	0.010 (0.01)
EGPIVc, VIIb	0.218*** (0.03)	0.039* (0.02)	0.023 (0.01)
EGPIVa, IVb	0.214*** (0.02)	0.105*** (0.01)	0.007 (0.01)
French origin	-0.019 (0.01)	-0.049*** (0.01)	-0.000 (0.00)
Private school	-0.047*** (0.01)	-0.062*** (0.01)	-0.027*** (0.01)
ZEP-school	-0.047** (0.02)	-0.008 (0.01)	-0.004 (0.01)
<i>City size</i> (Ref. >200,000 inh., Paris)			
< 5,000 inhabitants	-0.051*** (0.01)	-0.079*** (0.01)	-0.008 (0.01)
5,000-20,000	-0.042** (0.01)	-0.054*** (0.01)	-0.004 (0.01)
20,000-200,000	0.000 (0.01)	-0.022* (0.01)	0.004 (0.00)
Mark		0.082*** (0.00)	0.029*** (0.00)
Previous grade repetition		-0.210*** (0.01)	-0.063*** (0.01)
Family's request: LGT (1) vs. LPA (0)			0.669*** (0.02)
<i>N</i>	10466	10466	10466
<i>AIC</i>	12000.2	6817.0	2629.1

Note: AME=average marginal effect; SE=standard error adjusted for school-level clustering; * p<0.05; ** p<0.01; ***p<0.001. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Table A18 in the appendix presents results of an application of the KHB-method to Model 3. The numbers reveal that nearly all of the social class differentials in staff meetings' school track propositions are due to social class differences in students' performance and in families' school track requests. Student's mark, previous grade retention and family's request mediate between 93 and 96 per cent of the effects of EGP I, II, III and V and IVab. The effect of belonging to the class of agricultural workers and farmers is mediated by 90 per cent by student's school achievement and family's request. Generally, families' requests contribute more to the indirect effect (not shown in Table A18).

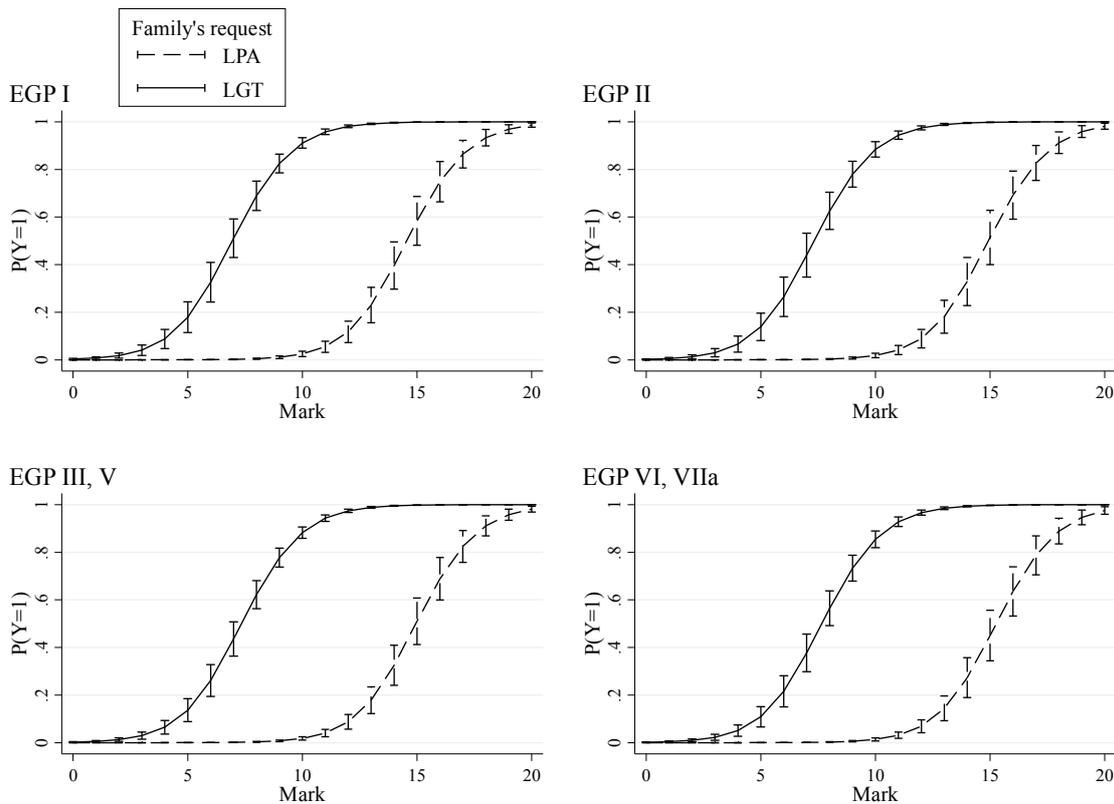
To illustrate the impact of family's school track request on the staff meeting's proposition by student's mark and social origin, Figure 20 presents predicted probabilities. They are based on Model 3 in Table 23 and represent French students who have not repeated grades in lower secondary school and who are attending a public school located in a larger city or Paris that is not a ZEP-school. Given the same mark, the staff meeting is more likely to propose the general track to families who requested LGT than to families who demanded LPA. However, even when a family requested the vocational track, the staff meeting increasingly proposes the general track when a student's marks are better than the mean mark (i.e. around 11). For instance, if a student from EGP III and V requested LPA and has a mark of 10, the predicted probability that the staff proposes LGT is slightly more than zero. In contrast, when the student has a mark of 18 the likelihood is more than 90 per cent.¹³⁰

At first sight, it appears that the effects of family's request do not vary by social class. Indeed, the variations are very small. Still, there are some important differences: For example, if a EGP I-student has a mark of 5 and demands LGT, the predicted probability that he is proposed LGT is nearly 20 per cent (see Figure A5). By contrast, if a family from the working class makes such an ambitious request even though the child has a mark of 5, the predicted probability is around 10 per cent. Moreover, the staff meeting would rather correct too modest requests of families from higher classes than of families of lower social origin (see Figure 20): When a student from EGP I whose parents requested LPA has a mark of 15, the predicted probability that the staff still proposes LGT is 60 per cent while when the student is from the working class the likelihood is around 45 per cent only.¹³¹

¹³⁰ Note that these are *predicted* probabilities. Lowess smoother confirm that the staff meeting becomes increasingly likely to propose LGT when a student's mark is better than 10 but actually there are no families in the sample who demand LPA when their child has a mark better than 16.

¹³¹ Again, note that these are predicted probabilities. In fact, no family, regardless of their social class position, requests the vocational track when the child has mark of 15.

Figure 20 Predicted probabilities of receiving an LGT-proposition by school track request, mark and social class



Note: LGT=general track, LPA=vocational track; estimates obtained from Model 3 in Table 23; probabilities are calculated for students of French origin with parents with intermediate educational motivation, having not repeated grades, attending a public school that is located in a large city or Paris and not in a ZEP, having an average number of siblings and at least one working parent; 95%-confidence intervals. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

The very small social class effect that remains even after student's performance and family's request are controlled could be caused by the *institutional setting* in which the staff meeting makes its decision. More specifically, the fact that families have the right to reject the school's proposition may motivate the teachers to consider even more the requests of families who are likely to reject. If these are – as suggested by the theory – families from higher social classes, this could be the cause for the small remaining social class effect. Alternatively, the remaining social class differences could be driven by teachers' evaluation of students' chances of success: Given the same actual performance and school track request, the staff meeting is more likely to propose LGT to higher service class students because the teachers think that students with such social background will be better supported and helped by their parents.

This assumption that the staff meeting considers parents' cultural capital and involvement corresponds to *Hypothesis H9*. To analyze this hypothesis, I run logistic regressions that additionally include variables that represent parents' cultural capital and

involvement in school. Hence, the included variables measure the indicators that teachers are supposed to consider when evaluating the likelihood that a family rejects (i.e. the parameter r) and a student's chances of success (i.e. the parameter a). Since the data I use do not enable me to distinguish r from a , I cannot infer whether the social class effect is caused either by the staff's evaluation of the student's chances of success (a) or by its assessment of the probability that the family would reject its proposition (r). Nevertheless, this analysis identifies an important effect of parental involvement and cultural resources on staff meetings' decisions.

Model 1 in Table 24 reveals that parental education mediates the remaining effect of EGP I and provides some support for *Hypothesis H9*. When parental education is controlled, the coefficient's significance vanishes and its size decreases to less than one third (AME=0.005; not significant). Parental education has a highly significant positive effect on the likelihood that the staff meeting proposes LGT instead of LPA. Holding constant social class, student's performance, family's request and the control variables, the probability that a student whose parents have an intermediate education (both parents have a CAP or BEP, or one parent has a *bac*) receives an LGT-proposition is 1.8 percentage points higher, on average, than the respective probability for students whose parents are lower educated (both parents have only a primary education degree or one parent has, at most, a CAP or BEP). The corresponding probability difference is 2.5 for students whose parents are higher educated (both parents have a *bac*, or at least one has a tertiary degree) as compared to parents with lower education. It seems that the staff meeting does not directly take into account a family's social class but parents' education or their abilities and cultural resources to meet the school's standards. Furthermore, it appears that – given the same request and level of student performance – the staff meeting is significantly more likely to propose LGT to parents with intermediate or higher education than to parents with lower education. According to the theory, this remaining effect could indicate that teachers perceive higher educated parents to be better able to support their children and to be more likely to make the effort of rejecting.

Alternatively, parental involvement is included in the regression (Model 2). More specifically, I take into account parents' attendance at parents' evenings, their initiation of meetings with teachers, teachers' initiation of meetings and PA-membership. This analysis provides evidence against *Hypothesis H9*: The EGP I effect remains significant at the same level and is only marginally reduced. This clearly indicates that parental involvement does *not* mediate the small social class effects that remain after controlling for performance and family's school track request. Yet, the different parental involvement types exert small direct

effects on staff meeting's proposition and including them slightly increases the model fit (AIC=2629 Model 3, Table 23; AIC=2609 Model 2, Table 24). Both parents' initiation of meetings and teachers' initiation have negative effects but only the effect of teachers' initiation is significant ($p < 0.05$). Still, it is interesting to have a look at the coefficient of parents' initiation of meetings: While controlling for performance makes the effect of parents' initiation of meetings on family's school track request become positive (see Table 20), the effect on the staff meeting's proposition remains negative. This indicates that – other than the parents seem to expect – teachers do not “reward” parents' initiation of meetings. Instead, this type of additional parent effort has a negative impact. The negative marginally significant effect of teachers' initiation of meetings could be due to the fact that teachers think that parents who had to be invited and did not contact the teachers by themselves will not support their children. Therefore, the teachers prefer to propose the vocational track.

PA-membership has a highly significant positive effect. This result could be driven by the attendance of members of PAs at the staff meeting (see Subchapter 2.3.2). This does not imperatively imply that the parents themselves are present at the staff meetings. It could also be that the parent representatives who often are PA-members act in the interests of the other PA-members. Another explanation could be that teachers think that parents who are PA-member will better support their children or are more likely to reject the staff meeting's proposition if it does not correspond to their request. Table A19 presents results of a separate analysis that investigates the effect of being parent representative.¹³²

Table A19 reveals that being parent representative in the staff meeting has a weaker impact on the staff meeting's decision than PA-membership (Model 1 and 2). Moreover, PA-membership more improves the model fit. When both types of involvement are taken into account, the effect of being parent representative becomes insignificant and is strongly reduced while the coefficient of PA-membership remains significant at the intermediate level ($p < 0.05$) but hardly decreases. 52 per cent of the parents who are PA-member are also parent representative in staff meetings. This indicates that one part of the positive effect of PA-membership can be explained through parents' attendance at the staff meetings; another part of the PA-membership effect is either due to the fact that the parent representatives in the staff meeting represent the interests of PA-members or – more probably – because teachers take into account this kind of involvement.

¹³² Since the parent representative variable has many missing values and hence would considerably reduce the sample size I conduct a separate analysis.

To examine whether the effects of parental involvement and education interact, I include variables that indicate the educational attainment of the parent who is involved (Model 3, Table 24). As the reference category is “tertiary education”, the coefficients’ negative signs indicate that an involved parent’s educational attainment has a positive effect. Controlling for parental education and parental involvement makes the effects become insignificant but they only marginally reduce their size and remain negative (Model 4). Therefore, we could infer that there is indeed a positive interaction of parental involvement and parental education, regardless of the type of involvement.¹³³

At the same time, the effects could be due to the fact that parent’s educational attainment is correlated with a specific type of involvement. In other words, higher educated parents are more likely to be PA-member, for example, and lower educated parents are more likely to be invited by the teachers. Since PA-membership exerts positive effects and initiation of meetings by the teachers has negative effects, the education of the involved parent has an effect.

When all of the indicators of cultural capital and parental involvement are included at one time the model fit further increases (Model 4). The effects of higher parental education, the education of the parent who is involved and parents’ initiation of meetings become insignificant, those of teachers’ initiation of meetings and intermediate parental education remain significant and their size only slightly changes. Hence, one can conclude that parents should either both have a CAP or BEP or at least one of them should have a *bac* if they want to increase their chances of getting an LGT-proposition. Moreover, being invited to meetings causes an unfavorable treatment by the teachers.

¹³³ An additional analysis that is not presented reveals however that an inclusion of interaction terms of parental involvement and education or of parental involvement and education of the specific parent who is involved decreases the model fit. This indicates that there is no interaction of parental education and involvement.

Table 24 Social class effects on staff meetings' school track propositions (LGT vs. LPA) and mediating effects of parental education and involvement (results of binary logistic regressions)

	Model 1		Model 2		Model 3		Model 4	
	AME	(SE)	AME	(SE)	AME	(SE)	AME	(SE)
<i>Social class</i> (Ref. EGPVI, VIIa)								
EGPI	0.005	(0.01)	0.019**	(0.01)	0.007	(0.01)	0.004	(0.01)
EGPII	-0.004	(0.01)	0.010	(0.01)	-0.003	(0.01)	-0.005	(0.01)
EGPIII, V	0.004	(0.01)	0.009	(0.01)	0.006	(0.01)	0.004	(0.01)
EGPIVc, VIIb	0.016	(0.01)	0.020	(0.01)	0.018	(0.01)	0.014	(0.01)
EGPIVa, IVb	0.000	(0.01)	0.006	(0.01)	0.003	(0.01)	-0.000	(0.01)
French origin	-0.002	(0.00)	-0.001	(0.00)	-0.000	(0.00)	-0.001	(0.00)
Private school	-0.029***	(0.01)	-0.026***	(0.00)	-0.029***	(0.01)	-0.027***	(0.01)
ZEP-school	-0.002	(0.01)	-0.003	(0.01)	-0.002	(0.01)	-0.002	(0.01)
<i>City size</i> (Ref. >200,000 inh., Paris)								
< 5,000 inhabitants	-0.008	(0.01)	-0.008	(0.01)	-0.007	(0.01)	-0.008	(0.01)
5,000-20,000	-0.004	(0.01)	-0.005	(0.01)	-0.004	(0.01)	-0.005	(0.01)
20,000-200,000	0.004	(0.00)	0.003	(0.00)	0.003	(0.00)	0.003	(0.00)
Mark	0.028***	(0.00)	0.028***	(0.00)	0.028***	(0.00)	0.027***	(0.00)
Previous grade repetition	-0.061***	(0.01)	-0.058***	(0.01)	-0.061***	(0.01)	-0.057***	(0.01)
Family' request: LGT (1) vs. LPA (0)	0.661***	(0.02)	0.661***	(0.02)	0.662***	(0.02)	0.654***	(0.02)
<i>Parental education</i> (Ref. lower)								
Intermediate	0.018***	(0.00)					0.013*	(0.01)
Higher	0.025***	(0.01)					0.012	(0.01)
Parents' evenings			0.002	(0.01)			0.009	(0.01)
Parents' initiation of meetings			-0.007	(0.00)			-0.005	(0.00)
Teachers' initiation of meetings			-0.013**	(0.00)			-0.012**	(0.00)
PA-membership			0.019***	(0.01)			0.016**	(0.01)
<i>Education of involved parent</i> (Ref. Tertiary degree)								
Baccalauréat					-0.004	(0.01)	-0.004	(0.01)
Vocational qualification					-0.019**	(0.01)	-0.013	(0.01)
Elementary education					-0.027***	(0.01)	-0.013	(0.01)
Other or no person involved					-0.007	(0.01)	0.005	(0.01)
<i>N</i>	10466		10466		10466		10466	
<i>AIC</i>	2613.3		2609.5		2617.4		2598.9	

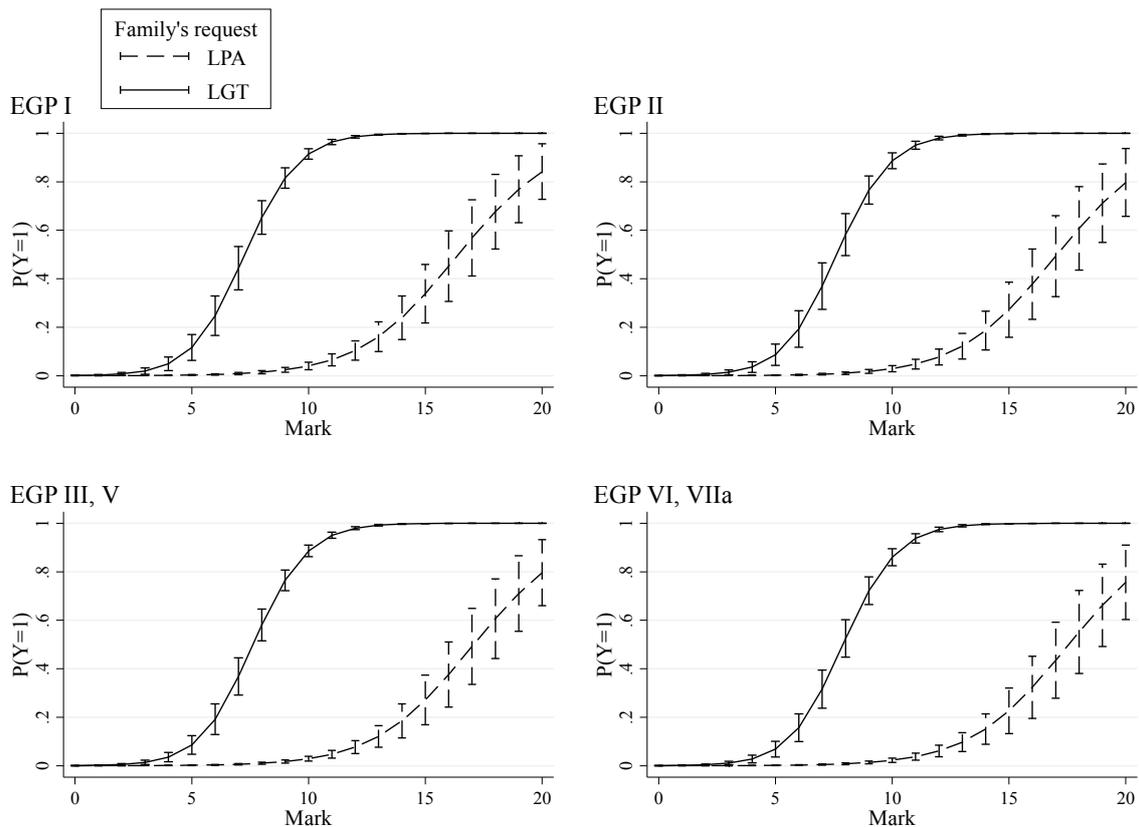
Note: AME=average marginal effect; SE=standard error adjusted for school-level clustering; * p<0.05; ** p<0.01; ***p<0.001. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

To test *Hypothesis H10*, I run separate logistic regressions that include interaction terms of marks with family's request, parental education and parental involvement. *Hypothesis H10* is based on the assumption that staff meetings take even more into account family's school track request, parent's involvement and their education when a student's chances of success are unclear and when the risk is high that a family rejects. None of the interactions, except that of marks and family's school track request, increases the model fit. Therefore, only the interaction of marks and family's request is further investigated with conditional effect plots that are based on the regression model including the interaction terms (Table A20). However, conditional effect plots obtained from the regression models not including interaction terms (i.e. the models presented in Table 24) reveal that, as expected, parents' education and their involvement have no effects when students' marks are very good but strongest effects when students' marks are in the middle range.¹³⁴

To examine the interaction of marks and family's request, which appeared to be significant and increased the model fit, Figure 21 presents predicted probabilities obtained from a regression model containing the interaction term (Table A20). The predicted probabilities hold again for French students attending public schools that are located in larger cities and that are no ZEP-schools. Figure A5 plots the corresponding discrete change effects. The slope of the curve for students whose families demanded LGT is steeper than the curve for students who requested LPA. For instance, while the predicted likelihood that the staff meeting proposes LGT to an EGP II-student whose parents requested LPA is zero per cent when the student's average mark is 5 and nearly 1 per cent when the student's mark is 7, the respective likelihoods for a similar student whose parents however requested LGT are 10 per cent (mark=5) and almost 40 per cent (mark=7). When students have marks under the mean, their school performance has a very strong positive impact when a family requested LGT while performance has almost no effect at all when the family requested LPA. However, given students' marks are above the mean, the staff meeting starts ignoring families' demands and becomes increasingly likely to propose LGT.

¹³⁴ Lowess smoother support this result. All additional analyses that are not presented are available on request.

Figure 21 Interaction effect of family's request and mark on staff meeting's proposition by social class, predicted probabilities

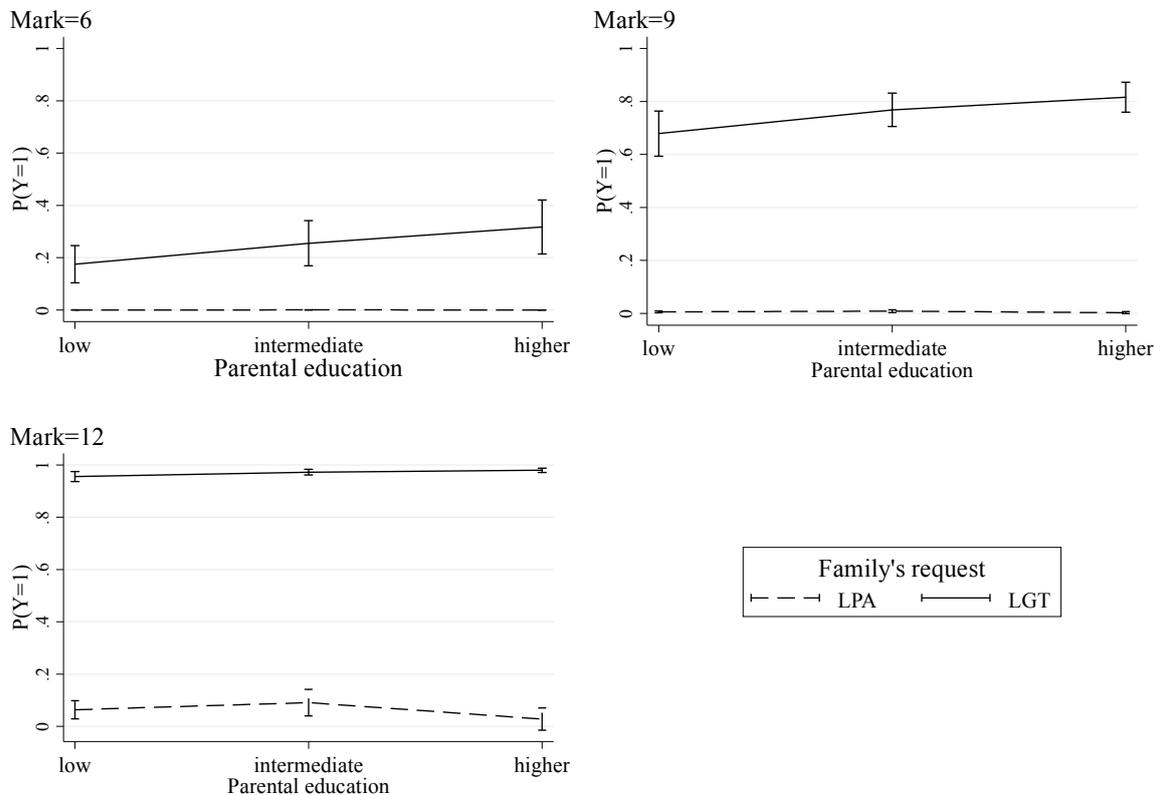


Note: LGT=general track, LPA=vocational track; estimates obtained from Model 1 Table A20; probabilities are calculated for students of French origin, having not repeated, with parents with intermediate educational motivation, attending a public school that is not in the ZEP-program and located in a large city or Paris, having an average number of siblings and at least one working parent and having not repeated grades in secondary school; 95%-confidence intervals. *Source:* Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Hypothesis H10a posits that the staff meeting also takes more account of a family's request when the parents are higher educated or involved. This assumption follows from similar ideas as Hypothesis H10: If the staff meeting is worried about keeping rejection rates low, as the theory suggests, it takes even more account of the requests of families who are likely to reject than of families who are not likely to reject. Regression analyses that take into account interactions of parental involvement and family's school track request show no increase of the model fit.¹³⁵ However, regression models containing interaction terms for family's request and parental education or educational attainment of the involved parent slightly increase the model fit (see Table A20 and Table 24). I further analyze these interactions with conditional effects plots (Figure 22 and Figure 23).

¹³⁵ The results of these analyses are not presented. They are available on request from the author.

Figure 22 Interaction effect of parental education and family's request on staff meeting's proposition (LGT vs. LPA) at three mark-levels (predicted probabilities)



Note: LGT=general track, LPA=vocational track; estimates obtained from Model 2 in Table A20; probabilities are calculated for students from EGP II, having not repeated, of French origin with parents with intermediate educational motivation, attending a public school that is located in a large city or Paris and not in a ZEP, having an average number of siblings and at least one working parent; 95%-confidence intervals. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

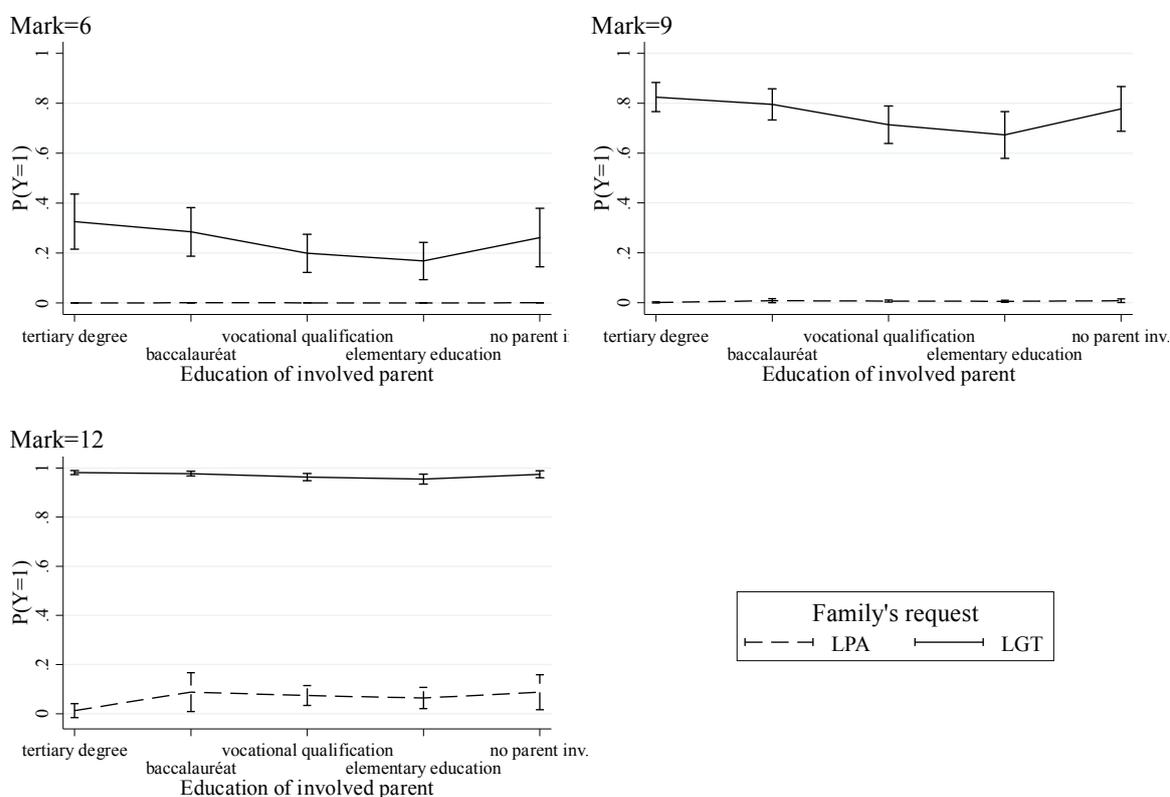
These conditional effect plots reveal that the effect of family's request varies by parental education when a student has marks in the middle range (Figure 22).¹³⁶ To evaluate the interaction effect, one has to observe the distance between the curve for the LGT-request and that for the LPA-request.¹³⁷ It appears that the staff meeting is more willing to accept the LGT-requests of higher educated parents than those of lower educated parents when a student's mark is 6 or 9, i.e. below average. This can be interpreted as support for *Hypothesis 10a*: the staff meeting proposes LGT to families if these seem likely to reject or because they seem better able to support their children. If a student has marks that are above the overall average (i.e. 11), the staff meeting is willing to accept the LGT-request of all families, regardless of parents' educational attainment.

¹³⁶ As actually very few families request LPA when students have good marks and very few families request LGT when students have very low marks, I focus on marks in the middle range. Moreover, loess smoother indicate that predicted probabilities for marks in these ranges fit well the actual distribution in the data.

¹³⁷ Instead, I could have shown discrete change effects but as I want to illustrate the absolute size of the probabilities, too, I present predicted probabilities.

Figure 23 addresses the interaction between family's request and educational attainment of the involved parent: The results are very similar to Figure 22. When a student's mark is 6 or 9, educational attainment of the involved parent increases the likelihood that the staff meeting accepts an LGT-request. Interestingly, when no parent or another person is involved, the staff meeting is also more willing to accept an LGT-request. The predicted probabilities further tell that when marks are relatively good (i.e. 12), education of the involved parent does not considerably increase the chance of LGT-propositions because practically all LGT-requests are accepted.

Figure 23 Interaction of education of the involved parent and family's request on staff meeting's proposition (LGT vs. LPA) at three mark-levels (predicted probabilities)



Note: LGT=general track, LPA=vocational track; estimates obtained from Model 3 in Table A20; probabilities are calculated for students from EGP II, having not repeated, of French origin with parents with intermediate educational motivation, attending a public school located in a large city or Paris and not in a ZEP, having an average number of siblings and at least one working parent; 95%-confidence intervals. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

8.4.2 DECISIONS OF THE HEADMASTER AND THE RECALL MEETING

Since the number of families who reject is small (see e.g. Subchapter 8.3.3), I present bivariate descriptive statistics to analyze whether families' social class affects headmasters' decisions. Among the families in the *basic sample*, 3 per cent have rejected the staff meeting's proposition and attended the talk with the headmaster.¹³⁸ The headmasters formulate a virtually binding school track decision for these families. As the observation number is very small, only careful interpretations are made. Cramer's V and Chi² tell a moderate significant relationship between family's social class and headmaster's decision (Table 25). Higher service class families are mostly imposed grade retention (57 per cent) while EGP II-families are more imposed the vocational track (38 per cent). For the families from the class of non-manual workers and supervisors of manual workers (EGP III, V), the rate of retention decisions is the highest (47 per cent) and among the working class (EGP VI, VIIa) LPA-decisions are the most frequent (58 per cent). Overall, grade retention appears to be headmasters' favorite option.

Moreover, it is interesting to know to which extent headmasters accept families' requests and whether there are social class differences in these acceptance rates. Since by far most families in this sample have demanded LGT, the rates of LGT-decisions by the headmasters represent these acceptance rates. Families from EGP II are the most likely to have their LGT-request accepted (29 per cent), but – as mentioned above – their rate of LPA-decisions is relatively high. All other classes have considerably lower rates of LGT-decisions, which are due – to a minimal extent – to lower rates of LGT-requests among these classes. In line with the theory, I infer that grade retention decisions are more prevalent among EGP I-families as compared to EGP II-families because headmasters use these as “compromise” to prevent rejections. By contrast, grade retention decisions may be frequent among students from EGP-class III and V because teachers need another year to better assess students' chances of succeeding in the general track. These results provide some weak support of *Hypothesis H11*.

¹³⁸ The 3 per cent correspond to 392 students out of 12 594 (i.e. the *basic sample*).

Table 25 Family's social class and headmaster's decision by social class (frequencies; percentages in parentheses)

EGP-class	I	II	III, V	IVc, VIIb	IVa, IVb	VI, VIIa	Total
<i>Headmaster's decision</i>							
LGT	20 (21.51)	13 (28.89)	22 (17.74)	2 (33.33)	7 (14)	9 (12.16)	73 (18.62)
LPA	20 (21.51)	17 (37.78)	44 (35.48)	2 (33.33)	20 (40)	43 (58.11)	146 (37.24)
GR	53 (56.99)	15 (33.33)	58 (46.77)	2 (33.33)	23 (46)	22 (29.73)	173 (44.13)
<i>Total</i>	93 (100)	45 (100)	124 (100)	6 (100)	50 (100)	74 (100)	392 (100)
<i>Cramer's V</i>	0.1942						
<i>Chi²</i>	29.555***						

Note: Due to rounding percentages not always sum up to 100. * p<0.05; ** p<0.01; ***p<0.001. *Source:* Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Families who reject a headmaster's decision initiate a recall meeting. In this meeting external teachers, the orientation advisors and the headmaster discuss the student's case (see Subchapter 2.3.1). Student and their parents can attend these meetings. Among the families in the *basic sample*, less than 2 per cent have rejected the headmaster's decision. As 98 per cent of these families have requested the general track (not shown in Table 26), the rates of LGT-decisions by the recall meeting indicate the rates of acceptance. Table 26 shows that recall meetings accept almost half of the demands of EGP I- and EGP II-families. As family's social class decreases, the rates of LPA-decisions increase. Generally, grade retention seems a popular choice. This further supports the assumption that it is used as compromise. However, since the recall meeting has the final say, it is certainly not used to prevent rejections. Rather, the additional school year in lower secondary school will give the student the chance to improve. Again, these results present weak support of *Hypothesis H11*.

Table 26 Family's social class and recall meeting's decision (frequencies)

EGP-class	I	II	III, V	IVc, VIIb	IVa, IVb	VI, VIIa	Total
<i>Recall meeting's decision</i>							
LGT	29	11	26	1	11	7	85
LPA	3	3	9	-	5	5	25
GR	27	9	29	1	10	19	95
<i>Total</i>	59	23	64	2	26	31	205
<i>Cramer's V</i>	10.2433						
<i>Chi²</i>	0.1581						

Note: Due to rounding percentages not always sum up to 100. * p<0.05; ** p<0.01; ***p<0.001. *Source:* Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

8.5 Grade retention decisions

As mentioned before, grade retention is not the most popular choice. In the end, 7 per cent of the students have to repeat grade 9 and will traverse the dialogue a second time. The percentage of repeating students slightly varies by social class: 7 per cent of EGP I-students, 6 per cent of EGP II-students, 8 per cent of students from EGP III and V, 5 per cent of students from EGP IVc and VIIb, 4 per cent of students from EGP IVab, and 9 per cent of students belonging to EGP VI and VIIa (see Figure 4 in Subchapter 8.1). Table 27 further describes the group of students in terms of their social background and their families' request. According to literature on the determinants of grade retention, one would expect high rates of lower-class students among those who have to repeat. However, among the 860 students in the *basic sample* for whom the final decision of the dialogue is grade retention, the rate of higher service class students is comparatively important (22 per cent). The rate of students from EGP III and V is the highest (36 per cent) and the respective rate of children of self-employed and the petty bourgeoisie is the lowest (2 per cent). This could be interpreted as first support of the assumption that higher-class families use GR as compromise or the school staff proposes it to higher-class families as compromise.

To have a first look at the "reasons" for retention, Table 27 also presents absolute chances and frequencies of students who have requested grade retention and of students who have not made this request but still have to repeat in the end. Overall, as one can see from the column rightmost, the rate of families who requested GR and of families that grade retention was imposed on are almost of the same size. However, the distribution slightly differs between social classes: While almost 68 per cent of the families from EGP I did not request grade retention, around 43 per cent of families from the lower service class and from the class

of non-manual workers and supervisors of manual workers did not demand retention. Almost every second working-class student who has to repeat in the end requested grade repetition.

Table 27 Social class and family's grade retention request among students for whom the final outcome is GR, by social class (percentages in parentheses)

EGP-class	I	II	III, V	IVc, VIIb	IVa, IVb	VI, VIIa	Total
Final outcome of dialogue is GR	186 (21.63)	95 (11.05)	313 (36.40)	150 (17.44)	17 (1.98)	99 (11.51)	860 (100)
<i>Among these:</i>							
Family's request was <u>not</u> GR	126 (67.74)	41 (43.16)	133 (42.49)	63 (42)	6 (35.29)	49 (49.49)	418 (48.60)
Family's request was GR	60 (32.26)	54 (56.84)	180 (57.51)	87 (58)	11 (64.71)	50 (50.51)	442 (51.40)

Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

These preliminary descriptive results show that families from the higher service class are relatively well represented among families whose child has to repeat grade 9. Interestingly, most of them did not want their child to repeat and hence must have received a proposition that does not correspond to their demand. One reason for this result could be that they made too ambitious requests, i.e. they demanded the general track although their child was poorly performing, and the staff proposed grade retention as a *compromise*. By contrast, for all other classes, the number of families who requested grade retention exceeds the number of families who did not make this request. Therefore, it seems that the other classes are more likely to request grade retention and the staff meetings are less likely to propose GR to them if they did *not* request it. The following sections present the results of multivariate analyses that examine social class effects on families' decisions to request grade retention instead of the vocational track and on staff meetings' choice of grade retention over the vocational track. These analyses attempt to shed light on the mechanisms that generate social class effects on families' and staff meetings' retention decisions.

8.5.1 FAMILY'S GRADE RETENTION REQUEST

Table 28 presents the results of logistic regressions of a binary variable that distinguishes between grade retention and the vocational track.¹³⁹ Model 1 reveals that – on average and holding constant student's French origin, school type and city size – the likelihood that an EGP I-family requests grade retention instead of LPA is 17 percentage points higher than the respective likelihood for a working class family (EGP VI, VIIa). The lower the social class, the smaller is the average probability difference. For instance, for EGP II the corresponding difference is only 11 percentage points and for EGP III and V it is 5 percentage points. This result supports *Hypothesis H12*. Families from the class of agricultural workers and farmers (EGP IVc, VIIb) are not significantly more likely to request GR instead of LPA than families from the working class.

Model 2 tests a part of *Hypothesis H13*: It takes into account family's economic situation (i.e. number of siblings and parents' employment status) and educational motivation. As expected, the model fit increases and the social class effects decrease. However, the social class effects remain highly significant. Hence, it appears that a family's resources to account for the economic costs of retention and its need to have its child attend the general track (i.e. the educational motivation) mediate a part of the social class differences in families' choice of grade retention over LPA. While presence of a non-working parent has no significant effect, number of siblings has a small negative effect that is marginally significant: On average and holding constant social class, educational motivation and the control variables, the likelihood that a family demands grade retention decreases with every additional child by 1 percentage point. High educational motivation has a highly significant positive effect: When a family thinks that a tertiary degree is necessary to find a job, the likelihood of requesting GR is almost 10 percentage points higher, on average, than when a family thinks that no degree or a vocational qualification is necessary to find a job.

Model 3 tests the other part of *Hypothesis H13* as it factors in students' previous grade repetition in lower secondary school. The model fit considerably increases and the social class effects are slightly reduced. The AME of the repetition variable tells that, on average, the likelihood that a family requests grade retention is almost 11 percentage points lower when the child has previously repeated grades than when he or she has not made that experience before. Model 4 takes into account students' marks and parents' performance assessment. The

¹³⁹ Table A21 lists means of the variables used in the analysis. The means are calculated separately for each social class in order to give an idea of the bridging hypotheses.

net effect of marks is supposed to represent families' evaluation of the likelihood that the staff meetings will not accept an LGT-request. I additionally include parents' performance assessment to capture the effect of marks on parents' evaluation of their child's chances of success. The effect of social class increases. This is due to the fact that marks are positively correlated with social class but negatively correlated with requesting grade retention. The highly significant negative effect of mark indicates that – as expected – families request GR when students' performance is low and thus when the likelihood that the staff meeting rejects an LGT-request is high.

Table 28 Social class effects on family's decision to choose grade retention over the vocational track (results of binary logistic regression; AMEs)

	Model 1 AME (SE)	Model 2 AME (SE)	Model 3 AME (SE)	Model 4 AME (SE)
<i>Social class</i> (Ref. EGPVI, VIIa)				
EGPI	0.170*** (0.03)	0.127*** (0.03)	0.122*** (0.02)	0.127*** (0.02)
EGPII	0.112*** (0.02)	0.083*** (0.02)	0.080*** (0.02)	0.079*** (0.02)
EGPIII, V	0.053*** (0.01)	0.047*** (0.01)	0.050*** (0.01)	0.049*** (0.01)
EGPIVc, VIIb	0.023 (0.02)	0.025 (0.02)	0.023 (0.02)	0.026 (0.02)
EGPIVa, IVb	0.051*** (0.02)	0.048*** (0.02)	0.049*** (0.02)	0.048*** (0.02)
French origin	-0.008 (0.01)	-0.009 (0.01)	-0.009 (0.01)	-0.006 (0.01)
Private school	-0.020 (0.01)	-0.022* (0.01)	-0.018 (0.01)	-0.013 (0.01)
ZEP-school	-0.011 (0.01)	-0.009 (0.01)	-0.008 (0.01)	-0.009 (0.01)
<i>City size</i> (Ref. >200,000 inh., Paris)				
< 5,000 inhabitants	-0.001 (0.01)	0.002 (0.01)	-0.006 (0.01)	-0.004 (0.01)
5,000-20,000	0.013 (0.01)	0.017 (0.01)	0.019 (0.01)	0.021 (0.01)
20,000-200,000	0.021 (0.01)	0.022 (0.01)	0.012 (0.01)	0.013 (0.01)
No parent working		-0.003 (0.02)	-0.003 (0.01)	-0.006 (0.01)
Number of siblings		-0.009* (0.00)	-0.010* (0.00)	-0.010* (0.00)
<i>Educational motivation</i> (Ref. Low)				
Intermediate		0.020 (0.01)	0.020 (0.01)	0.019 (0.01)
High		0.092*** (0.02)	0.089*** (0.01)	0.089*** (0.01)
Previous grade repetition			-0.105*** (0.01)	-0.107*** (0.01)
Marks				-0.007*** (0.00)
Parents' performance assessment				-0.003 (0.01)
<i>N</i>	3610	3610	3610	3610
<i>AIC</i>	1728.6	1677.4	1487.0	1477.3

Note: AME=average marginal effect; SE=standard error adjusted for school-level clustering; * p<0.05; ** p<0.01; *** p<0.001. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Applying the KHB-method to Model 4, I want to decompose the total social class differentials into direct effects and indirect effects. By this means, I am able to quantify the

extent to which the social class effects are explainable by family's economic situation, educational motivation and previous grade repetition, i.e. the parameters costs, educational motivation and likelihood of improvement during repetition. If the employed variables suffice to operationalize the parameters, this analysis shows to which extent the theoretical model can explain social class effects on families' grade retention decisions.

The results of the KHB-application reveal that only a little extent of the social class effects is due to the core decision-making parameters (Table A22). The effect of EGP I, for instance, is mediated by 22 per cent through subjective and "objective" performance measures, family's economic resources and educational motivation. With regard to the EGP II-effect, still 23 per cent are driven by these factors. By contrast, they mediate around 3 per cent of the effects of EGP III and V or EGP IVa and IVb. Since extremely few families from EGP-class IVc and VIIb are in the sample, the effects are not significant. The results cannot support *Hypothesis H13* since a large part of the social class effects remains unexplained. This is either because the theoretical model does not take account of all mechanisms at work or because the variables do not capture the full effects of the decision-making parameters. For instance, parents' cultural capital and interaction terms could improve the model specification. Indeed, parental education mediates some part of the social class effect, but interaction terms do not improve the model fit.¹⁴⁰ As the explanatory power of the model does not increase when interaction terms of social class or educational motivation and mark are included, I conclude that there is no evidence in favor of *Hypothesis H13b* either.

8.5.2 STAFF MEETING'S GRADE RETENTION PROPOSITION

In the present subchapter, I investigate the impact of students' social class on staff meetings' decision to propose grade retention instead of the vocational track. Table 29 presents results of nested binary logistic regressions of staff meetings' choice between GR and LPA. Moreover, Table A23 presents a simple bivariate analysis of social class and the variables used in the analysis: It lists means of the employed variables by social class. The first model in Table 29 includes only the control variables. The results provide evidence in favor of *Hypothesis H14*: student's social class has a strong positive highly significant effect on the probability that the staff proposes grade retention instead of the vocational track.

Model 2 to 4 test *Hypothesis H15*. The models reveal that taking into account previous grade repetition strongly increases the model fit but only marginally changes the social class

¹⁴⁰ Results are not presented but available from the author. They were not included because they further reduce the sample size and must be interpreted with caution.

effects (Model 2). If a student has repeated grades in lower secondary school, the average probability that the staff meeting proposes grade retention again is 23 percentage points lower than the corresponding probability if a student has not repeated grades before. When family's request is included, the model's explanatory power augments dramatically and the effects of EGP I and II are reduced by three quarters (Model 3). On average and holding constant social class, the control variables and previous grade repetition, the likelihood that a family who has demanded GR receives a GR-proposition instead of an LPA-proposition is 80 percentage points higher than the likelihood that a family who demanded LPA is proposed GR. Also, if a family has requested LGT, the staff meeting is more likely to propose GR than LPA (AME=0.37, $p<0.00$). This indicates that staff meetings may use grade retention as a compromise. Moreover, since social class has a strong positive effect even when family's request is controlled, it seems that the staff meeting proposes this compromise to families who appear likely to reject or to have cultural resources to support their child during repetition. Model 4 factors in parental education and involvement to further examine this assumption. The AIC-value decreases only marginally but the social class effects are considerably reduced. Notably, the EGP II-effect becomes insignificant. Parental education has a highly significant positive effect; among the parental involvement-variables only PA-membership has a positive effect that is significant at a low level ($p<0.05$). This result provides support for the assumption that the staff meeting takes into account parents' cultural capital and involvement. Yet, a highly significant positive EGP I-effect remains and indicates that other mechanisms contribute to the social class effect. Finally, Model 5 takes into account students' marks. The model fit does not increase, the effect of mark is not significant and the social class effect is not modified. Hence, students' marks neither explain the little remaining EGP I-effect nor do they have an independent effect on teachers' retention decisions.

Table 29 Social class effects on staff meeting's decision to choose grade retention over the vocational track (results of binary logistic regression; AMEs)

	Model 1 AME (SE)	Model 2 AME (SE)	Model 3 AME (SE)	Model 4 AME (SE)	Model 5 AME (SE)
<i>Social class</i> (Ref. EGPVI, VIIa)					
EGPI	0.385*** (0.03)	0.342*** (0.02)	0.081*** (0.01)	0.046*** (0.01)	0.046*** (0.01)
EGPII	0.171*** (0.03)	0.170*** (0.02)	0.041** (0.01)	0.010 (0.01)	0.011 (0.01)
EGPIII, V	0.093*** (0.01)	0.101*** (0.01)	0.040*** (0.01)	0.030** (0.01)	0.031** (0.01)
EGPIVc, VIIb	0.041 (0.03)	0.033 (0.03)	0.039 (0.03)	0.018 (0.03)	0.018 (0.03)
EGPIVa, IVb	0.100*** (0.02)	0.099*** (0.02)	0.018 (0.01)	0.006 (0.01)	0.005 (0.01)
French origin	-0.027* (0.01)	-0.028* (0.01)	-0.003 (0.01)	-0.006 (0.01)	-0.004 (0.01)
Private school	0.018 (0.01)	0.024 (0.01)	0.007 (0.01)	0.006 (0.01)	0.007 (0.01)
ZEP-school	-0.061*** (0.02)	-0.052** (0.02)	-0.027* (0.01)	-0.025* (0.01)	-0.025* (0.01)
<i>City size</i> (Ref. >200,000 inh., Paris)					
< 5,000 inhabitants	-0.082*** (0.02)	-0.084*** (0.01)	-0.024* (0.01)	-0.022* (0.01)	-0.021 (0.01)
5,000-20,000	-0.055*** (0.02)	-0.050** (0.02)	-0.012 (0.01)	-0.010 (0.01)	-0.008 (0.01)
20,000-200,000	-0.016 (0.02)	-0.029* (0.01)	-0.001 (0.01)	-0.000 (0.01)	0.000 (0.01)
Previous grade repetition		-0.231*** (0.01)	-0.128*** (0.01)	-0.125*** (0.01)	-0.125*** (0.01)
<i>Family's request</i> (Ref. LPA)					
LGT			0.373*** (0.02)	0.364*** (0.02)	0.366*** (0.02)
GR			0.796*** (0.04)	0.785*** (0.04)	0.780*** (0.04)
<i>Parental education</i> (Ref. lower)					
Intermediate				0.030*** (0.01)	0.030*** (0.01)
Higher				0.054*** (0.01)	0.054*** (0.01)
Parents' evenings				-0.016 (0.01)	-0.016 (0.01)
Parents' initiation of meetings				-0.007 (0.01)	-0.008 (0.01)
Teachers' initiation of meetings				-0.005 (0.01)	-0.006 (0.01)
PA-membership				0.024* (0.01)	0.024* (0.01)
Mark					-0.003 (0.00)
<i>N</i>	4465	4465	4465	4465	4465
<i>AIC</i>	3625.2	3082.1	1458.4	1435.0	1435.3

Note: LGT=general track, LPA=vocational track, GR=grade retention; AME=average marginal effect; SE=standard error adjusted for school-level clustering; * p<0.05; ** p<0.01; *** p<0.001. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

To further test *Hypothesis H15*, I apply the KHB-method to Model 5. Table A24 in the appendix reveals that a very large extent of the effects of EGP I, II and EGP IVab is mediated

by previous grade repetition, family's school track request, parental involvement and education: 89 per cent of the effects of EGP II and 82 per cent of the effect of EGP I is due to social class differences in previous grade repetition, family's request, parents' cultural capital and involvement. As to the effects of the class of non-manual workers and supervisors of manual workers (EGP III and V), the mechanisms explain 46 per cent. These results provide evidence in favor of *Hypothesis H15*.

8.5.3 REJECTIONS OF RETENTION DECISIONS AND HEADMASTER'S RETENTION DECISION

As families have the right to reject the staff meeting's proposition, it is interesting to investigate what happens after the school proposed grade retention to families that did not ask their children to be retained. Table 30 presents a bivariate analysis of social class and families' rejection decisions for families who were proposed GR but did not request GR (N=534). Over all social classes, only about one third of the families decide to reject the staff meeting's GR-proposition; most families accept it. Hence, regardless of social class, most of the final retention decisions – for students who did not request grade repetition – are due to propositions by the staff meetings that were accepted by the families.

Table 30 *Frequencies and percentages of family rejections of GR-propositions by social class (percentage are in parentheses)*

EGP-class	I	II	III, V	IVc, VIIb	IVa, IVb	VI, VIIa	Total
Staff meeting proposed GR but family did not request GR	170 (31.84)	51 (9.55)	173 (32.40)	72 (13.48)	9 (1.69)	59 (11.05)	534 (100)
<i>Among these:</i>							
Family rejected and attended talk with headmaster	62 (36.47)	15 (29.41)	63 (36.42)	23 (31.94)	3 (33.33)	19 (32.20)	185 (100)
Family did <u>not</u> reject	108 (63.53)	36 (70.59)	110 (63.58)	49 (68.06)	6 (66.67)	40 (67.80)	349 (100)

Note: GR=grade retention. Due to rounding means not always sum up to 1. *Source:* Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Subchapter 8.4.2 addressed headmasters' decisions and decisions of the recall meetings. The bivariate analysis presented in these sections revealed that headmasters are most likely to propose grade retention to families from EGP I: for 57 per cent of the higher service class families the headmasters choose grade retention while they do so only for 33 per cent of lower

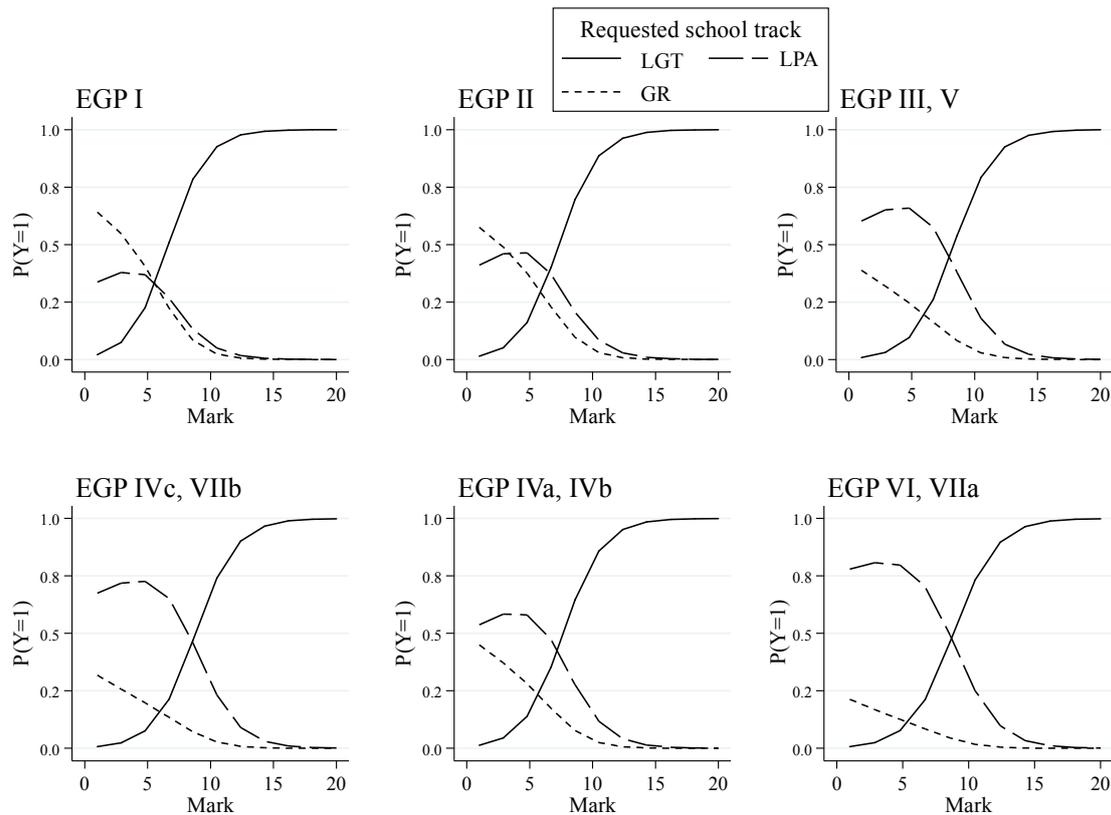
service class families, for 47 per cent of EGP III and V-families and 30 per cent of working class families (Table 25). Even though the frequencies are generally very low, it appears that there is some association between social class and headmasters' retention decisions. Possibly, as mentioned above, headmasters propose grade retention to families who are likely to reject.

8.5.4 GRADE RETENTION NEXT TO LGT AND LPA

To complete the picture, this last results section presents predicted probabilities for all three options (i.e. LGT, LPA, GR). The computed probabilities are based on multinomial regression models (Table A25). Figure 24 addresses families' requests while Figure 25 illustrates staff meetings' propositions.

Figure 24 reveals that families' generally opt for grade retention and the vocational track only when students have relatively low marks. Service class families prefer to request grade retention than LPA when their children have very low marks while families from all other class rather choose LPA. Moreover, with a family's social class, increases the predicted probability that it chooses grade retention instead of the vocational track. For instance, when a student's mark is 5, the predicted probability that an EGP I-family requests grade retention is around 35 per cent and the respective likelihood that a working class family demands retention is around 10 per cent. This result provides evidence in favor of *Hypothesis H13a*. It seems to indicate that families who need their child to attend the general track (i.e. higher class families) and who see that the risk is high that the child will not be proposed the general track (because the child has low marks) demand grade retention as a compromise.

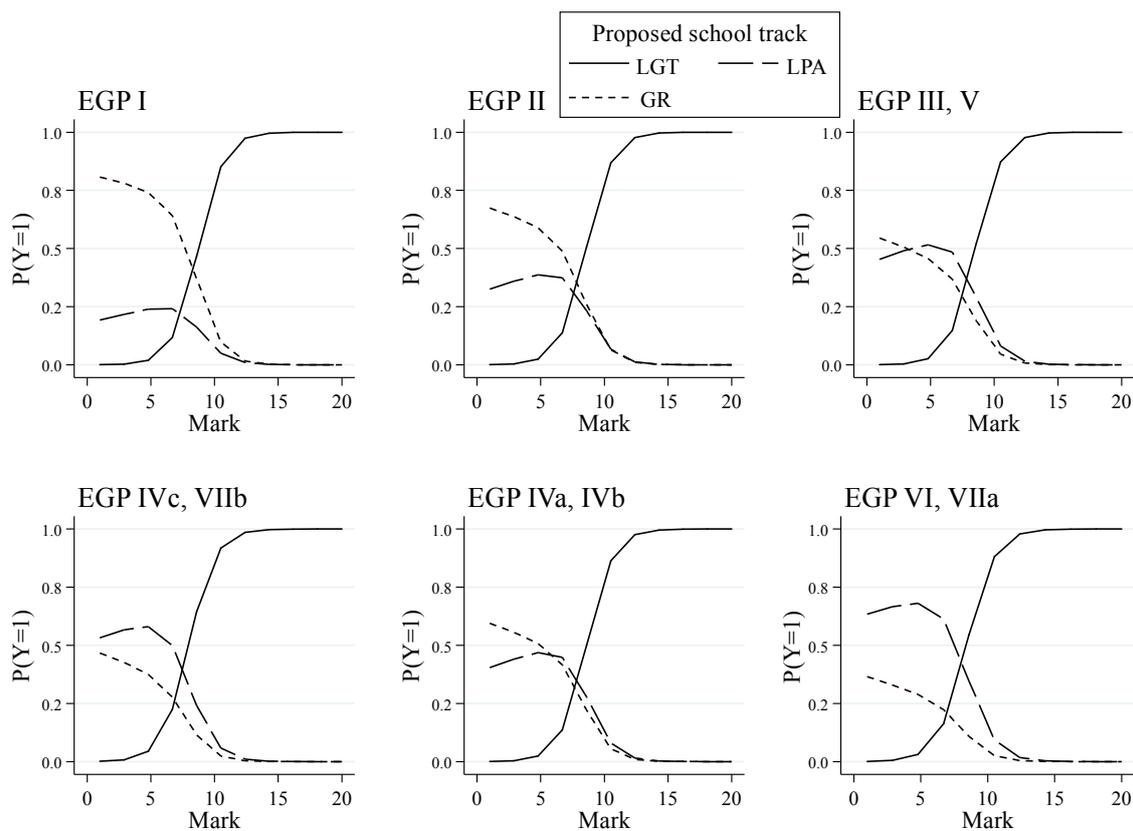
Figure 24 Cumulative predicted probabilities of families' request (LGT, LPA, GR) by mark and social class



Note: LGT=general track, LPA=vocational track, GR=grade retention; estimates obtained from Model 1 in Table A25; probabilities are calculated for students of French origin, who have not repeated grades, attending a public school that is not in the ZEP-program but located in a large city or Paris. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

The predicted probabilities plotted in Figure 25 hold for families who requested LGT and students who did not repeat before. The likelihood that a staff meeting proposes grade retention is considerably higher when a family's social class is high. Generally, the predicted probabilities that the staff meeting proposes GR are higher than the predicted probabilities that a family demands it. The results show again that the staff meeting uses grade retention as a compromise and that it proposes it notably to families from higher social classes. According to the theory, two mechanisms could explain the strong social class effect: Either, teachers and headmaster tend to think that these families are more likely to reject and therefore the staff meeting uses grade retention as a means to prevent them from rejecting; or, the staff meeting considers higher class parents to be better able to support their children during repetition and to help them improve enough to be admitted to the general track one year later.

Figure 25 Cumulative predicted probabilities of staff meeting's proposition (LGT, LPA, GR) by mark and social class



Note: LGT=general track, LPA=vocational track, GR=grade retention; estimates obtained from Model 2 in Table A25; probabilities are calculated for students of French origin with parents, attending a public school that is not in the ZEP-program, that is located in a large city or Paris. *Source:* Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

9 Summary and conclusions

This thesis has addressed how families and school staff make school track choices within an *institutionalized dialogue between family and school*. The interesting features of this dialogue are: (i) families make official school track requests *prior* to a virtually binding school track proposition by the staff meeting, (ii) families can reject these propositions which implies a meeting with the headmaster, (iii) based on this meeting the headmaster makes another proposition, which can be rejected again, (iv) a second rejection leads to a recall meeting in which external teachers and other professionals make a binding decision, (v) families and the school staff can opt for grade repetition.

To theoretically address the mechanisms that generate social class differences in families' and school staffs' decisions along the institutionalized dialogue, I have integrated arguments of the "cultural approach" to social inequality in educational attainment into seminal "rational action approaches" to educational decision-making. More specifically, I have adopted a theoretical suggestion by Lareau and Weininger (2003, see also Lareau 1987, Lareau 1989, Bourdieu and Passeron 1964) on *cultural capital* in family-school interactions to explain how social class effects on families' and school staffs' decisions emerge within the specific institutional circumstances of the dialogue. The fundament of the theoretical model on families' decision-making was the SEU-approach by Esser (1999b; see also Breen and Goldthorpe 1997; Erikson and Jonsson 1996). Moreover, I applied SEU-theory to explain how student social class affects staff meetings' school track propositions, headmasters' and recall meetings' decisions.

I used national longitudinal data on French secondary students – the *panel d'élèves du second degré* or "panel 1995" – to provide an empirical test of the theoretical models on families' and school staffs' decision-making within the institutionalized dialogue. As the data contain detailed information on every step of the dialogue, student's school performance right before the dialogue, family characteristics such as parents' occupations and educational attainment, parents' involvement in school, parents' assessment of their child's performance and of the utility of different educational attainments, I was able to test detailed hypotheses.

In sum, developing the theoretical model and testing detailed hypotheses derived from it produced findings that contribute to four research topics. *First*, with regard to *families' decision-making*, the findings of this dissertation are in line with previous tests of the theoretical models of Esser (1999b), Breen and Goldthorpe (1997) and Erikson and Jonsson (1996). I find that social class differences in families' school track choices are strongly

mediated by families' evaluation of students' chances of success and their desire to maintain the family's social status while the costs of education seem to play a minor role (Need and De Jong 2002; Stocké 2007). Moreover, like previous *direct* tests of the models, i.e. tests using direct measurements of the subjective decision-making parameters, this dissertation finds that these theoretical models cannot fully account for the social class differences in families' school track requests and therefore other mechanisms than those proposed by the models may be at work (see Becker 2000; Gabay-Egozi, Shavit and Yaish 2010; Stocké 2007).

As mentioned above, this thesis advanced the argument that social class differences in parents' cultural capital and in their involvement in school operate as an additional mechanism: Higher class parents have "cultural resources" – e.g. knowledge of the educational system, linguistic abilities and experience in dealing with school staff – that make them more confident in the school context and therefore more likely to be involved in school; when families make their school track requests, they take into account their involvement and cultural capital in order to evaluate the *chance that the staff meeting accepts their school track request*. Moreover, they consider these factors to assess their *chances to persuade the headmaster or the recall meeting in case they have to reject*. Following the assumption of Lareau and Weiniger (2004), I assume that parents with the "school relevant" cultural capital and parents who are involved think that the staff meeting or the headmaster and recall meeting will accept their demands because they "meet the school's standards", i.e. they are interested in their children's education, have the capacities to support them and are willing to do so.

Indeed, I find that parents' cultural capital measured as parents' educational attainment and parents' involvement explain an additional part of the social class effects on families' school track requests. Moreover, the refined theoretical model is further supported as families take more into account parents' cultural capital and involvement when the risk is high that the staff meeting does not accept an LGT-request (i.e. when student's marks are low) and even when the likelihood that the staff meeting accepts is high, parents are more concerned with status decline when they think that the student has low chances of success. Hence, it seems in sum that social class differences in parents' capacities to meet the school's standards are indeed a mechanism that adds to those proposed by Esser's (1999b) model, Breen and Goldthorpe's (1997) model or the model by Erikson and Jonsson's (1996).

However, the extended model seems still not able to fully explain the social class effects on families' school track requests. There remains an important unexplained part indicating either that the employed variables are not sufficient to operationalize the decision-making

parameters or that even more mechanisms are at work. For instance, social class differences in *benefits* such as a direct pleasure of attending the general track (e.g. Erikson and Jonsson 1996; Holm and Jaeger 2008) or social returns (e.g. Jaeger 2007) could add to expected mechanisms. Due to the indirect measurement of certain parameters, notably of parents' strategic use of their cultural capital and involvement, I also cannot rule out that *competing* mechanisms, i.e. mechanism that are in contradiction to the rational action approach, are at work. The effect of parents' education, for instance, could reflect class-specific norms and values and not parents' subjective evaluation of their capacities to persuade the school staff. Certainly, the effect of parents' involvement also reflects the fact that parents who plan to demand the general track early get involved in order to improve their chances of being proposed the general track. Even though I cannot identify the causal relation and cannot surely conclude that families' directly consider their cultural capital and involvement to evaluate the likelihood that in the end they have their will, the results unambiguously show that involvement is related to families' school track requests and that this association is interrelated with social class differences in these requests.

Another important finding of this dissertation is that families from higher social classes are more likely to reject staff meetings' school track propositions than families from lower social classes and that a small but considerable part of secondary effects on final outcomes of the dialogue is due to families' rejections. As assumed by the theoretical model, parents' evaluation of the costs and likelihood of social decline (i.e. their educational motivation) and parents' cultural capital seem to explain the social class effects on families' rejection decisions. To my knowledge, no quantitative empirical study has investigated social class effects on families' objecting against recommendations by the school up to now.

Second, in respect of *school staffs' decision-making*, this thesis detects considerable effects of student social origin on staff meetings' propositions even when student performance is controlled. This result is in line with previous studies on teachers' school track decisions. Moreover, like studies that compare transition rates in German federal states with binding and non-binding teacher recommendations (e.g. Dollmann 2011; Neugebauer 2010), I find that secondary effects are smaller on staff meetings' decisions than on families' requests. While previous research examines effects of parents' aspirations on teacher school track recommendations (e.g. Ditton and Krüsken 2006; 2009; Dollmann 2011; Schneider 2011), analyzing the institutionalized dialogue enabled an examination of the impact of "formalized aspirations", namely families' school track requests, on teacher decisions. This dissertation's findings line up with those of previous analyses of the dialogue: families' school track

requests have extremely strong effects on staff meetings' propositions and mediate a great extent of the secondary effects (e.g. Roux and Davailon 2001). However, I moreover detect a small but significant social class effect on staff meetings' propositions that remains even when student's performance and family's request is controlled. This deviating result could be due to the fact that I use other data or, more likely, to a different operationalization of student social origin.¹⁴¹ While previous findings indicate that the staff meeting does not correct too ambitious school track requests of higher class families, this dissertation's result even indicates that staff meetings slightly reinforce secondary effects on the final outcome.

To explain how secondary effects on teacher decisions emerge within the dialogue's institutional setting, I followed the argument on higher class families making use of their cultural capital to get preferable treatment by teachers (Lareau and Weininger 2003): I proposed that staff meetings and headmasters take into account parents' cultural capital and their involvement in school in order to assess the likelihood that a family rejects their school track propositions. Since governmental authorities require schools to keep rejection rates low, teachers and notably headmasters are supposed to be very concerned with trying to satisfy wishes of families who seem likely to reject (see e.g. Duru-Bellat, Jarousse and Mingat 1993; Duru-Bellat 2002; Masson 1994; 1997; Van Zanten 2002). Another reason why teachers may take into account parents' cultural capital and involvement is to assess parents' capacities and willingness to support and help their children with school issues (see Duru-Bellat 1996; Duru-Bellat 2002: 80). This argument is in keeping with previous research on determinants of teachers' school track recommendations and grading-behavior: A group of quantitative and qualitative studies shows that teachers consider parents' support of their children and that this partly explains social class effects on their decisions (e.g. Hollstein 2008; Schneider 2011; Stahl 2007).

The empirical analyses in this dissertation show indeed that parents' cultural capital measured by means of parents' educational attainment has a positive effect on staff meetings' school track propositions. Moreover, parents' cultural capital seems to explain the small social class effect that remains after controlling for student's performance and family's request. Among the parental involvement types, only PA-membership has a significant positive effect on staff meetings' propositions. Partly, this effect seems mediated by the fact that members in parent associations hold offices as parent representatives and therefore attend staff meetings. However, this involvement does not explain any social class effect. Finally, educational

¹⁴¹ While Roux and Davailon (2001) use an occupation classification that is common in France, I employ the EGP-schema (see Subchapter 7.2.2).

attainment of the parent who is involved in school slightly increases the likelihood that the staff meeting proposes the general track and mediates the small remaining social class effect.

Hence, it appears that social class differences in parents' cultural capital but not those in their involvement contribute to the generation of secondary effects on staff meetings' decisions. Since the measurement of parents' cultural capital is rather broad and there is no direct measure of teachers' perception of parents' abilities to support their children or the likelihood that they reject, I cannot rule out that other mechanisms than those proposed in the theoretical model explain the little net social class and parental education effects. According to other theories and previous research, it could be that teachers take into account student abilities, effort and habits that are related to parents' education and class position (see Bowles and Gintis 1976) or they have a "taste for discrimination" (Becker 1971).

Third, this dissertation's analysis of the French institutionalized dialogue between family and school also contributes to research on *grade retention decisions*. While most of this literature deals with consequences of retention for students and schools or with determinants of retention (e.g. student social origin, gender, school performance), few studies address how relevant actors – i.e. families, teachers and headmasters – make grade retention decisions and which mechanisms generate social class differences in these decisions. The results of this thesis line up with previous findings and complement them: Like studies for Denmark, the Netherlands or other analyses of the French dialogue, I show that families from higher social classes are more likely to request grade retention instead of a lower vocational track. As against previous research, I empirically test the argument that families' *educational motivation* or their fear of status decline drives the social class effects and I find, in fact, that this mechanism contributes to the social class effects.¹⁴² Moreover, I suggest that previous grade retention is a main mechanism as it indicates that repeating a school year did not improve a student's performance and has a negative effect on marks.

In respect to staff meetings' and headmasters' grade retention decisions, literature on the French dialogue argues that the school uses this option as a *compromise*: Teachers' and headmasters' propose it to families from higher social classes in order to prevent them from rejecting (Duru-Bellat 2002; Roux and Davailon 2001). Accordingly, previous analyses of the dialogue find that staff meetings are more likely to propose grade retention to students of higher social origin who are poorly performing than to students of less favorable social

¹⁴² The study by Jacob and Tieben 2009, mentioned in Subchapter 6.3, appears as an exception since it analyzes the effect of a status maintenance measure. However, this study does not *focus* on grade retention decisions.

background (Roux and Davailon 2001). This dissertation's results correspond. Beyond the current state of research, I show that grade retention in lower secondary school, parents' cultural capital and PA-membership mediate social class differences in staff meetings' grade retention propositions. Still, even after additionally controlling for family's request and student's marks, staff meetings are more likely to propose retention to higher service class students. These results provide evidence for the assumption that teachers use retention as a compromise to prevent rejections. However, the remaining social class effect and the direct effect of parental cultural capital could also be due to teachers' tastes for discrimination, their use of student social class as indicator for students' chances to succeed in the general track or unobserved student habits, behaviors and abilities.

Fourth, this dissertation draws considerable attention to *family-school interactions* in terms of parents' involvement in school. In line with quantitative and qualitative studies, my analyses reveal that parents of higher social origin are generally more likely to be involved (e.g. Lareau and Horvat 1999; Lee and Bowen 2006; Reay 1999; 2005). However, the size of the social class effects varies depending on which type of involvement is considered. For instance, social class effects on attendance at parents' evenings and initiation of meetings with teachers are comparatively small while those on PA-membership and being parent representative are more important. Moreover, in keeping with previous research, these social class differences seem considerably mediated by parents' cultural capital – if educational attainment is a valid proxy for parents' educational knowledge, abilities and confidence in dealing with school staff. Yet, cultural capital cannot explain all of the social class effects; parents' educational aspirations and status maintenance desires appear to play an important part, too. The results further indicate that parents become involved for different reasons: While parents who think that parents and teachers should work closely and parents who have high aspirations and well performing students attend parents' evenings or are members in PAs, parents with high educational motivation become involved when their children are poorly performing.

What are the general implications of this dissertation's findings? They contribute to the discussion on whether to leave more decision-making power to families or to teachers. On the one hand, recent findings notably for Germany indicate that teachers make more meritocratic decisions than parents and hence researchers claim that more decision-making power should be transferred to schools (e.g. Becker 2000, Dollmann 2011, Neugebauer 2010). On the other hand, it is argued that families will find ways to influence the teachers and that teachers' school track decisions are not meritocratic either (e.g. Dollmann 2011, Jackson et al. 2007).

The *démocratization* reforms of the French educational system which implemented the institutionalized dialogue and gave students and their parents a voice have followed the idea that families should be involved in the decision-making process so that lower class parents can send their children to higher school tracks even when teachers would send them to lower school tracks (Lapostolle 2005; Prost 1997; also Schimpl-Neimanns 2000 and Geißler 2005 on Germany). However, as this thesis shows, it is not mainly the teachers, who produce social inequality in educational choices, they rather *reproduce* it as they follow legal requirements. That is to say, when not only law tells teachers to take into account students' educational plans but also governmental authorities require schools to keep rejection rates low and rejection rates are published to indicate "school's quality", teachers have not much scope to reduce secondary effects on the actual transitions. Hence, it can generally be inferred that teachers should be given considerable autonomy of decision and that requirements "from above" as well as publications of "school's quality"-indicators such as rejection rates could contribute to social inequality in educational opportunity (see e.g. Duru-Bellat 1996; Karsten, Visscher and De Jong 2001).

Following up on this reasoning, it also appears that giving families the right to reject schools' propositions could contribute to social inequality in educational transitions. On the hand, this could be because families from higher social classes are more likely to reject and, by this means, manage to gain access to the general track. Moreover, their school track requests may already be more ambitious because they are willing to reject. On the other hand, the governmental requirements of keeping rejection rates low strengthen social class effects on staff meetings' and headmasters' decisions. Therefore, family's right to reject appears to be an institutional feature that rather increases social inequality in educational opportunity than reduces it.

As this dissertation reveals that families from higher social classes are more likely to request grade retention and are more likely to be proposed grade retention by the school, it can be inferred that giving families and school staff the option to choose grade retention could reinforce social inequality in student transitions to general upper secondary education. In fact, this is only the case if, after the repeated grade, students gain access to the general track. Indeed, preliminary descriptive analyses (not presented in this thesis) of the sample of students who have to repeat grade 9 reveal that 80 per cent of those who initially demanded the general track gain access to the general track after repetition. Among the students who initially demanded grade retention, more than 50 per cent attend the general track after repetition. Additionally taking into account student social class shows that around 80 per cent

of the EGP I-students who demanded grade retention gain access to the general track after repetition. Among the other classes, the rate of students who requested grade retention and manages to attend the general track after repetition is considerably smaller. Given these preliminary results and the general finding of previous research that retention has negative effects on students' long-term achievement, self-perception and later labor market outcomes and that high rates of retained students imply increased costs for schools (see Subchapter 5.3), it has to be questioned whether grade retention actually meets its "purpose". Moreover, other than suggested in the literature (see e.g. Klosterman and De Graaf 2010), letting teachers decide seems no solution as long as families make official requests and schools have to restrict rejection rates.

Finally, what role does parental involvement play in the generation of social inequality in transitions to next educational levels? As argued in previous research, it appears that higher class parents of poorly performing students initiate meetings with teachers while lower class parents have to be invited by the teachers. Hence, French secondary schools seem to not promote family-school interactions in ways that reduce social inequality in parents' involvement in school. As teachers' initiation of meetings has a significant negative effect on the chance that staff meetings propose the general track even when student performance is controlled, it seems important to find ways to make lower class parents of students seek contact with the school by themselves. Following literature on parental involvement, an inviting school climate, e.g. through friendly school staff, could be a solution (Griffith 1998; Hoover-Dempsey et al. 2005).

Other notable involvement types are membership in parent associations and being parent representatives: It seems that, in view of the staff meeting's proposition, higher class parents and hence parents with higher aspirations become engaged in these ways. However, these involvement types only marginally contribute to social class effects on staff meetings' decisions. Still, they have positive effects on the likelihood that staff meetings propose the general track even when student performance, social class, parental involvement and family's request is controlled. Therefore, formal promotion of parental involvement through giving power to PAs and letting parent representatives attend staff meetings seem not contribute to social inequality in staff meetings' decisions. While this thesis has analyzed whether parental involvement "mediates" social class effects on families' and school staffs' educational choices, further research should investigate whether parental involvement "moderates" these effects and hence whether involvement can reduce or would reinforce social inequality in educational decisions.

A clear limitation of this dissertation's empirical analysis is that only very few of the decision-making parameters can be operationalized directly and the employed "direct" measures have weaknesses, too. In particular, I cannot directly test the model on teachers' decision-making. Therefore, it is not possible to identify whether the effects of parental involvement and education are driven by staff meetings' evaluation of the likelihood that the family rejects or of student's chances of success. Moreover, I cannot rule out that competing theoretical arguments such as tastes for discrimination or class-specific norms and values explain these effects. With regard to families' decision-making, the data does not enable me to measure families' subjective evaluation of the costs of education and of grade retention or the full scope of the likelihood and costs of status decline.

Nevertheless, a general advantage of the indirect testing strategy is that it captures the association between the macro- and the micro-level of the explanation of sociological phenomena since it has to test hypotheses that link individuals' social situations with their actual decisions (Brüderl 2004). By contrast, the direct strategy sticks with the micro-micro-link. It is argued that sociologists should pay more attention to actors' social situations than to "psychological processes" such as the formation of subjective perceptions like in the direct testing strategy and therefore the focus of the indirect strategy corresponds more to that of sociology in general (Goldthorpe 1998; Kroneberg und Kalter 2012). Moreover, I suggest that a direct test of teachers' decision-making with survey data could generally be problematic since social desirability could distort teachers' answers (see Stahl 2007 and Nölle et al. 2009). This appears particularly likely in France where extensive public and political discussions on social inequality in educational opportunity, accompanied by the research of Bourdieu and his colleagues, led to important reforms and raise the school staff's awareness for the topic. Hence, indirect tests with secondary data appear to be a reasonable approach, but still the disadvantage of indirect tests remains that no *empirical* evaluation of competing theories can be made (Goldthorpe 1998: 169).

This is where future research has to tie in with: It has to theoretically specify and identify empirically competing and complementing mechanisms. One factor that seems particularly important within the French dialogue is the availability of places in surrounding upper secondary schools, for instance. As indicated by previous research, school context effects could cause variations in secondary effects on families' requests and staff meetings propositions over schools and even contribute to the secondary effects on the individual level (see e.g. Duru-Bellat, Jarousse and Mingat 1993; Duru-Bellat and Mingat 1989). To test such a mechanism and other (related) school effects (e.g. effects of school's social composition)

data is necessary that nests larger numbers of students per school and provides detailed information on available places in surrounding schools.

With this “school-level perspective” comes another mechanism that this dissertation neglects but that may contribute to the generation of social class differentials within the dialogue: social class differences in *social capital*, i.e. social networks that provide school relevant resources (e.g. informal knowledge of the educational system), and the influence of significant others (see e.g. Coleman 1988; Morgan 1998). For instance, there may be a higher social cohesion among parents of students enrolled in schools with higher average social status (e.g. private schools) and therefore these parents may be more encouraged to object the school staff, make “risky” school track requests and reject staff meetings’ and headmasters’ propositions. Moreover, social class effects on the evaluation of “social benefits” such as staying in contact with peers or satisfying the expectations of members of the same social class could play a part.

Moreover, an application of game theory to families’ and schools’ decision-making within the dialogue appears to be a fruitful refinement of this thesis since SEU-theory has limitations regarding the explanation of the interdependence of the decisions of actors (Brüderl 2004: 166-167; Diekmann and Voss 2004: 18). When the consequences of the actions of an individual depend on the strategies of other individuals, the probabilities that they assign to the consequences are not *exogenous* anymore. Instead, they are endogenously depending on the “situation of strategic interdependence”. Then, since each actor takes into account the behavior of the other when forming his subjective expectations, an infinite regression of interdependent expectations is caused. This regression process has to be stopped at one time. Typically game theory enables the researcher to detect the strategies that both actors – here the families and the school staff – follow and at which point their “bargaining” reaches an *equilibrium* (e.g. the so-called “Nash-equilibrium”) and stops.

Finally, this dissertation is a case study that provides detailed theoretical arguments and empirical tests on how social class differences in families’ and school staffs’ decisions emerge under the specific institutional circumstances of the French dialogue between family and school. Its findings should incite other case studies investigating social class effects on educational choices to put more emphasis on the specific institutional setting of these choices. Corresponding additional mechanisms should be specified and empirically tested (see also Becker 2000).

As this thesis concentrates on one time point and one country, it does not observe a counterfactual situation, i.e. an institutional context that differs in the relevant aspects (e.g. family's right to reject). Hence, this thesis does not show whether the fact that families make their requests prior to the staff meeting's proposition increases social class effects as compared to when families do not make their decision in such a setting. For the same reason, it does not reveal whether parents would be less involved in a context that does not promote parental involvement in the ways in which the French educational system does so, or whether social class effects on families' requests would be smaller if they did not have the right to reject. Therefore, future research should conduct *cross-country comparisons* or analyze social class effects before and after reforms that alter regulations of transitions to next educational levels in order to evaluate whether institutional circumstances such as rejection rights or the order of family-school decisions reinforce or reduce social inequality in education. The theoretical model developed and tested in this dissertation provides a theoretical foundation for such analyses.

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Table A1 Theoretically expected decisions of the staff meeting by likelihood of success (a) and likelihood of rejection (r)

Likelihood of success (a)	Likelihood of rejection (r)	Result		Decision
		SEU(LGT)	SEU(notLGT)	
1	0		$G > -D$	LGT
1	1		$G > -D$	LGT
0	0		$-D < G$	notLGT
0	1		$-D = -D$	LGT, notLGT

Note: SEU=Subjective Expected Utility, LGT=general track, -D=staff meeting's costs of rejection and of inappropriate decision, G=staff meeting's benefits of appropriate decision.

Table A2 Assignment of PCS-codes to EGP-classes

EGP-class	Assignment of PCS-code according to Brauns, Haun and Steinmann (1997)	Assignment of two-digit codes that are provided by the “panel 1995”-survey
I	31, 33, 34, 37, 38	31, 32, 33, 34, 35**, 37, 38
II	43	42**, 43, 44†, 45†
IIIa	54	52**, 53†, 54
IIIb	55	55, 56**
IVab	21, 22, 23	21, 22, 23**
IVc	11, 12, 13	10
V	48	46**, 47**, 48
VI	62, 63, 64, 65	61
VIIa	67, 68	66
VIIb	69	69

<i>No EGP class*</i>	-	81, 85, 86, 99

Note: PCS=Professions et Catégories socio-professionnelles. *This group contains parents who never worked, generally have no occupation, whose occupation cannot be assigned a PCS-code to, who are not known or died. **According to Brauns, Haun and Steinmann (1997: 43-44) the assignment of these codes is difficult and more information is needed. For instance, occupations with code 23 (entrepreneurs with more than 10 employees) are assigned to EGP I when the entrepreneur has at least 50 employees and to EGP IVa when she has less than 50 employees. As the “panel 1995” only tells whether there are more or less than 10 employees, I assign occupations with code 23 – and all other codes with ** – at own discretion. † No direct assignment information is provided by Brauns, Haun and Steinmann (1997) on these codes since they are collapsed versions and hence too “general”. One example is code 53 “policemen and army”. I assign these codes at own discretion, too.

Table A3 Secondary effects on family's request, staff meeting's proposition and final outcome (results of binary logistic regression; logits)

	Family's request Logit (SE)	Staff's proposition Logit (SE)	Final outcome Logit (SE)
<i>Social class</i> (Ref. EGPVI, VIIa)			
EGPI	2.321*** (0.11)	2.031*** (0.11)	2.223*** (0.12)
EGPII	1.440*** (0.10)	1.362*** (0.11)	1.471*** (0.11)
EGPIII, V	0.607*** (0.07)	0.613*** (0.08)	0.652*** (0.08)
EGPIVc, VIIb	0.105 (0.13)	0.244 (0.14)	0.210 (0.14)
EGPIVa, IVb	1.000*** (0.10)	0.831*** (0.11)	0.897*** (0.11)
French origin	-0.578*** (0.07)	-0.461*** (0.08)	-0.504*** (0.08)
Private school	-0.238** (0.08)	-0.568*** (0.08)	-0.548*** (0.08)
ZEP-school	-0.136 (0.09)	-0.068 (0.11)	-0.086 (0.11)
<i>City size</i> (Ref. >200,000 inh., Paris)			
< 5,000 inhabitants	-0.871*** (0.09)	-0.748*** (0.09)	-0.790*** (0.09)
5,000-20,000	-0.646*** (0.09)	-0.526*** (0.10)	-0.542*** (0.10)
20,000-200,000	-0.351*** (0.08)	-0.204* (0.09)	-0.239** (0.09)
Mark	0.588*** (0.02)	0.808*** (0.02)	0.764*** (0.02)
Previous grade repetition	-1.507*** (0.07)	-1.707*** (0.08)	-1.703*** (0.07)
Constant	-4.692*** (0.17)	-7.435*** (0.22)	-6.857*** (0.21)
<i>N</i>	11576	11071	10999
<i>AIC</i>	8492.6	7309.7	7282.9

Note: SE=standard error adjusted for school-level clustering; * p<0.05; ** p<0.01; ***p<0.001. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Table A4 Social class effects on attendance at parents' evenings (results of binary logistic regression; logits and AMEs)

	Model 1		Model 2		Model 3	
	b (SE)	AME (SE)	b (SE)	AME (SE)	b (SE)	AME (SE)
<i>Social class</i> (Ref. EGPVI, VIIa)						
EGPI	0.951*** (0.08)	0.125 (0.01)	0.192 (0.11)	0.025 (0.01)	0.148 (0.11)	0.019 (0.01)
EGPII	1.083*** (0.11)	0.136 (0.01)	0.428*** (0.12)	0.052 (0.01)	0.403*** (0.12)	0.049 (0.01)
EGPIII, V	0.506*** (0.07)	0.076 (0.01)	0.268*** (0.07)	0.034 (0.01)	0.269*** (0.07)	0.034 (0.01)
EGPIVc, VIIb	0.308* (0.14)	0.049 (0.02)	0.038 (0.14)	0.005 (0.02)	0.003 (0.14)	0.000 (0.02)
EGPIVa, IVb	0.522*** (0.10)	0.078 (0.01)	0.219* (0.10)	0.029 (0.01)	0.218* (0.10)	0.028 (0.01)
French origin	0.163** (0.06)	0.021 (0.01)	0.111 (0.06)	0.014 (0.01)	0.126* (0.06)	0.016 (0.01)
Private school	0.352*** (0.08)	0.041 (0.01)	0.318*** (0.08)	0.037 (0.01)	0.319*** (0.08)	0.037 (0.01)
ZEP-school	0.059 (0.09)	0.007 (0.01)	0.121 (0.09)	0.014 (0.01)	0.109 (0.09)	0.013 (0.01)
<i>City size</i> (Ref. >200,000 inh., Paris)						
< 5,000 inhabitants	0.083 (0.08)	0.010 (0.01)	0.079 (0.08)	0.009 (0.01)	0.072 (0.08)	0.009 (0.01)
5,000-20,000	-0.075 (0.08)	-0.010 (0.01)	-0.067 (0.08)	-0.008 (0.01)	-0.070 (0.08)	-0.009 (0.01)
20,000-200,000	-0.074 (0.07)	-0.009 (0.01)	-0.074 (0.07)	-0.009 (0.01)	-0.076 (0.07)	-0.009 (0.01)
<i>Parental education</i> (Ref. Lower)						
Intermediate			0.759*** (0.06)	0.104 (0.01)	0.723*** (0.06)	0.097 (0.01)
Higher			1.063*** (0.10)	0.132 (0.01)	0.973*** (0.10)	0.121 (0.01)
Parents' performance assessment					0.234*** (0.03)	0.029 (0.00)
Constant	1.052*** (0.07)		0.916*** (0.07)		0.363*** (0.11)	
<i>N</i>	12146		12146		12146	
<i>AIC</i>	10085.6		9892.6		9846.2	

Note: AME=average marginal effect; SE=standard error adjusted for school-level clustering; * p<0.05; ** p<0.01; ***p<0.001. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Table A5 Social class effects on parent's initiation of meetings with teachers (results of binary logistic regression; logits and AMEs)

	Model 1		Model 2		Model 3	
	b (SE)	AME (SE)	b (SE)	AME (SE)	b (SE)	AME (SE)
<i>Social class</i> (Ref. EGPVI, VIIa)						
EGPI	0.250*** (0.06)	0.055 (0.01)	0.251** (0.08)	0.055 (0.02)	0.391*** (0.08)	0.082 (0.02)
EGPII	0.310*** (0.07)	0.069 (0.02)	0.311*** (0.08)	0.069 (0.02)	0.399*** (0.08)	0.084 (0.02)
EGPIII, V	0.103 (0.06)	0.022 (0.01)	0.103 (0.06)	0.022 (0.01)	0.115 (0.06)	0.023 (0.01)
EGPIVc, VIIb	-0.490*** (0.13)	-0.093 (0.02)	-0.491*** (0.13)	-0.093 (0.02)	-0.408** (0.13)	-0.074 (0.02)
EGPIVa, IVb	0.054 (0.08)	0.012 (0.02)	0.054 (0.08)	0.011 (0.02)	0.065 (0.08)	0.013 (0.02)
French origin	-0.004 (0.05)	-0.001 (0.01)	-0.004 (0.05)	-0.001 (0.01)	-0.029 (0.05)	-0.006 (0.01)
Private school	0.456*** (0.05)	0.104 (0.01)	0.456*** (0.05)	0.104 (0.01)	0.467*** (0.05)	0.101 (0.01)
ZEP-school	-0.229** (0.08)	-0.048 (0.02)	-0.229** (0.08)	-0.048 (0.02)	-0.208* (0.08)	-0.042 (0.02)
<i>City size</i> (Ref. >200,000 inh., Paris)						
< 5,000 inhabitants	-0.293*** (0.06)	-0.064 (0.01)	-0.293*** (0.06)	-0.064 (0.01)	-0.278*** (0.06)	-0.058 (0.01)
5,000-20,000	-0.191** (0.06)	-0.042 (0.01)	-0.191** (0.06)	-0.042 (0.01)	-0.194** (0.06)	-0.041 (0.01)
20,000-200,000	-0.168** (0.05)	-0.037 (0.01)	-0.168** (0.05)	-0.037 (0.01)	-0.164** (0.05)	-0.035 (0.01)
<i>Parental education</i> (Ref. Lower)						
Intermediate			0.003 (0.05)	0.001 (0.01)	0.108* (0.05)	0.022 (0.01)
Higher			-0.001 (0.07)	-0.000 (0.01)	0.242*** (0.07)	0.051 (0.01)
Parents' performance assessment					-0.610*** (0.03)	-0.127 (0.01)
Constant	-0.753*** (0.06)		-0.754*** (0.06)		0.657*** (0.09)	
<i>N</i>	12099		12099		12099	
<i>AIC</i>	15164.5		15168.5		14623.5	

Note: AME=average marginal effect; SE=standard error adjusted for school-level clustering; * p<0.05; ** p<0.01; ***p<0.001. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Table A6 Social class effects on teachers' initiation of meetings with parents (results of binary logistic regression; logits and AMEs)

	Model 1		Model 2		Model 3	
	b (SE)	AME (SE)	b (SE)	AME (SE)	b (SE)	AME (SE)
<i>Social class</i> (Ref. EGPVI, VIIa)						
EGPI	-0.611*** (0.08)	-0.088 (0.01)	-0.278** (0.10)	-0.040 (0.01)	-0.112 (0.10)	-0.015 (0.01)
EGPII	-0.450*** (0.09)	-0.068 (0.01)	-0.149 (0.10)	-0.022 (0.01)	-0.049 (0.10)	-0.007 (0.01)
EGPIII, V	-0.243*** (0.06)	-0.039 (0.01)	-0.117 (0.07)	-0.017(0.01)	-0.117 (0.07)	-0.016 (0.01)
EGPIVc, VIIb	-0.512*** (0.15)	-0.076 (0.02)	-0.375* (0.15)	-0.052 (0.02)	-0.244 (0.15)	-0.032 (0.02)
EGPIVa, IVb	-0.247** (0.09)	-0.040 (0.01)	-0.088 (0.09)	-0.013 (0.01)	-0.082 (0.10)	-0.011 (0.01)
French origin	-0.166** (0.06)	-0.025 (0.01)	-0.140* (0.06)	-0.020 (0.01)	-0.203*** (0.06)	-0.028 (0.01)
Private school	0.300*** (0.06)	0.046 (0.01)	0.319*** (0.06)	0.048 (0.01)	0.346*** (0.06)	0.049 (0.01)
ZEP-school	0.035 (0.09)	0.005 (0.01)	0.003 (0.09)	0.000 (0.01)	0.053 (0.09)	0.007 (0.01)
<i>City size</i> (Ref. >200,000 inh., Paris)						
< 5,000 inhabitants	-0.246*** (0.07)	-0.036 (0.01)	-0.245*** (0.07)	-0.036 (0.01)	-0.228** (0.08)	-0.031 (0.01)
5,000-20,000	-0.243*** (0.07)	-0.036 (0.01)	-0.248*** (0.07)	-0.037 (0.01)	-0.259*** (0.08)	-0.035 (0.01)
20,000-200,000	-0.286*** (0.06)	-0.042 (0.01)	-0.287*** (0.06)	-0.042 (0.01)	-0.299*** (0.07)	-0.040 (0.01)
<i>Parental education</i> (Ref. Lower)						
Intermediate			-0.395*** (0.06)	-0.059 (0.01)	-0.269*** (0.06)	-0.036 (0.01)
Higher			-0.473*** (0.08)	-0.069 (0.01)	-0.159 (0.08)	-0.022 (0.01)
Parents' performance assessment					-0.914*** (0.03)	-0.122 (0.00)
Constant	-1.028*** (0.07)		-0.951*** (0.07)		1.130*** (0.10)	
<i>N</i>	12094		12094		12094	
<i>AIC</i>	11178.4		11129.6		10345.0	

Note: AME=average marginal effect; SE=standard error adjusted for school-level clustering; * p<0.05; ** p<0.01; ***p<0.001. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Table A7 Social class effects on PA-membership (results of binary logistic regression; logits and AMEs)

	Model 1		Model 2		Model 3	
	b (SE)	AME (SE)	b (SE)	AME (SE)	b (SE)	AME (SE)
<i>Social class</i> (Ref. EGPVI, VIIa)						
EGPI	2.007*** (0.10)	0.249 (0.01)	0.950*** (0.12)	0.112 (0.01)	0.912*** (0.12)	0.107 (0.01)
EGPII	1.733*** (0.11)	0.194 (0.01)	0.803*** (0.12)	0.090 (0.01)	0.783*** (0.12)	0.088 (0.01)
EGPIII, V	0.827*** (0.10)	0.063 (0.01)	0.454*** (0.10)	0.045 (0.01)	0.450*** (0.10)	0.045 (0.01)
EGPIVc, VIIb	1.315*** (0.16)	0.124 (0.02)	0.891*** (0.16)	0.103 (0.02)	0.864*** (0.16)	0.100 (0.02)
EGPIVa, IVb	0.993*** (0.12)	0.081 (0.01)	0.507*** (0.13)	0.051 (0.01)	0.505*** (0.13)	0.051 (0.01)
French origin	0.218** (0.07)	0.027 (0.01)	0.206** (0.07)	0.025 (0.01)	0.209** (0.07)	0.025 (0.01)
Private school	-0.052 (0.07)	-0.007 (0.01)	-0.086 (0.07)	-0.011 (0.01)	-0.077 (0.07)	-0.009 (0.01)
ZEP-school	0.045 (0.11)	0.006 (0.01)	0.135 (0.11)	0.017 (0.01)	0.130 (0.11)	0.017 (0.01)
<i>City size</i> (Ref. >200,000 inh., Paris)						
< 5,000 inhabitants	-0.143 (0.08)	-0.018 (0.01)	-0.115 (0.08)	-0.014 (0.01)	-0.127 (0.08)	-0.016 (0.01)
5,000-20,000	-0.132 (0.08)	-0.017 (0.01)	-0.092 (0.08)	-0.012 (0.01)	-0.094 (0.08)	-0.012 (0.01)
20,000-200,000	-0.161* (0.07)	-0.021 (0.01)	-0.153* (0.07)	-0.019 (0.01)	-0.159* (0.07)	-0.020 (0.01)
<i>Parental education</i> (Ref. Lower)						
Intermediate			0.876*** (0.08)	0.082 (0.01)	0.848*** (0.08)	0.080 (0.01)
Higher			1.538*** (0.09)	0.185 (0.01)	1.471*** (0.10)	0.176 (0.01)
Parents' performance assessment					0.175*** (0.03)	-0.022 (0.00)
Constant	-2.903*** (0.10)		-3.231*** (0.11)		-3.649*** (0.14)	
<i>N</i>	12157		12157		12157	
<i>AIC</i>	10038.7		9738.1		9713.1	

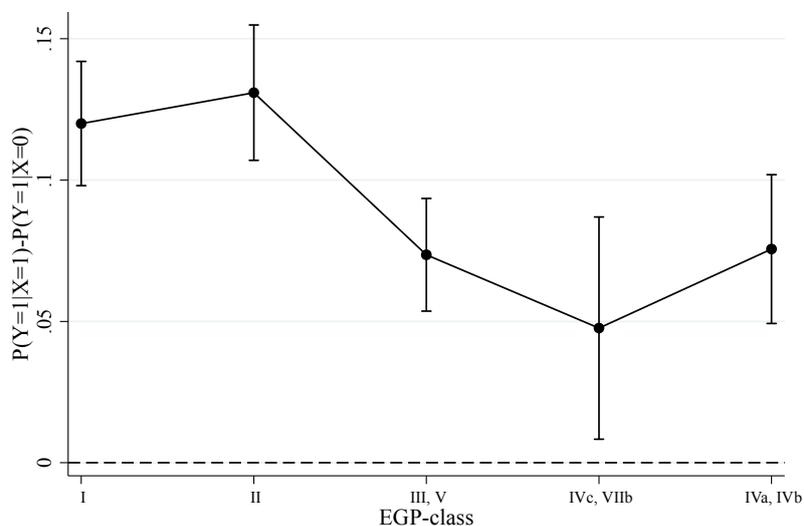
Note: AME=average marginal effect; SE=standard error adjusted for school-level clustering; * p<0.05; ** p<0.01; ***p<0.001. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Table A8 Social class effects on being Parent representative in the staff meetings (results of binary logistic regression; ; logits and AMEs)

	Model 1		Model 2		Model 3	
	b (SE)	AME (SE)	b (SE)	AME (SE)	b (SE)	AME (SE)
<i>Social class</i> (Ref. EGP VI, VIIa)						
EGP I	1.879*** (0.13)	0.153 (0.01)	0.774*** (0.16)	0.061 (0.01)	0.730*** (0.16)	0.057 (0.01)
EGP II	1.719*** (0.14)	0.130 (0.01)	0.730*** (0.16)	0.057 (0.01)	0.710*** (0.16)	0.055 (0.01)
EGP III, V	0.862*** (0.14)	0.043 (0.01)	0.443** (0.14)	0.031 (0.01)	0.440** (0.14)	0.031 (0.01)
EGP IVc, VIIb	1.445*** (0.20)	0.096 (0.02)	0.948*** (0.21)	0.080 (0.02)	0.923*** (0.21)	0.078 (0.02)
EGP IVa, IVb	0.988*** (0.17)	0.053 (0.01)	0.467** (0.17)	0.033 (0.01)	0.471** (0.17)	0.033 (0.01)
French origin	0.370*** (0.09)	0.031 (0.01)	0.368*** (0.09)	0.030 (0.01)	0.371*** (0.09)	0.030 (0.01)
Private school	-0.661*** (0.09)	-0.051 (0.01)	-0.684*** (0.10)	-0.052 (0.01)	-0.674*** (0.10)	-0.052 (0.01)
ZEP-school	0.231 (0.13)	0.022 (0.01)	0.317* (0.13)	0.031 (0.01)	0.316* (0.13)	0.031 (0.01)
<i>City size</i> (Ref. >200,000 inh., Paris)						
< 5,000 inhabitants	0.124 (0.10)	0.011 (0.01)	0.154 (0.10)	0.014 (0.01)	0.140 (0.10)	0.013 (0.01)
5,000-20,000 inh.	0.092 (0.10)	0.008 (0.01)	0.133 (0.10)	0.012 (0.01)	0.130 (0.10)	0.012 (0.01)
20,000-200,000 inh	-0.047 (0.09)	-0.004 (0.01)	-0.040 (0.09)	-0.003 (0.01)	-0.050 (0.09)	-0.004 (0.01)
<i>Parental education</i> (Ref. Lower)						
Intermediate			1.042*** (0.12)	0.062 (0.01)	1.007*** (0.12)	0.061 (0.01)
Higher			1.648*** (0.13)	0.130 (0.01)	1.570*** (0.13)	0.123 (0.01)
Parents' performance assessment					0.194*** (0.04)	0.017 (0.00)
Constant	-3.582*** (0.14)		-4.007***		-4.471*** (0.19)	
<i>N</i>	10415		10415		10415	
<i>AIC</i>	6606.4		6419.3		6401.2	

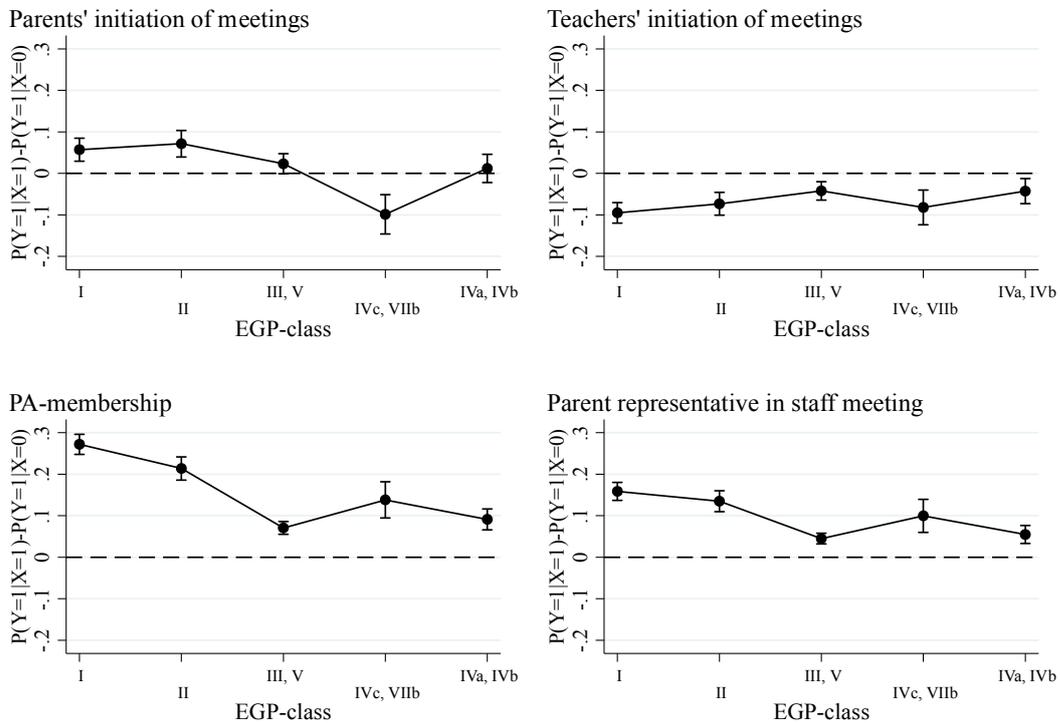
Note: AME=average marginal effect; SE=standard error adjusted for school-level clustering; * p<0.05; ** p<0.01; ***p<0.001. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Figure A1 Discrete change effects of social class on attending parents' evenings



Note: Estimates obtained from Model 1 in Table A4; a discrete change effect corresponds to the difference in probabilities of $Y=1$ between each social class and the reference class (EGP VI, VIIa); probabilities are calculated for students of French origin attending a public school that is located in a large city or Paris and not in a ZEP. *Source:* Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Figure A2 Discrete change effects of social class on parents' initiation of meetings, teachers' initiation of meetings, PA-membership and being Parent representative



Note: Estimates obtained from Model 1 in Table A5, A6, A7 and A8; a discrete change effect corresponds to the difference in probabilities of $Y=1$ between each social class and the reference class (EGP VI, VIIa); probabilities are calculated for students of French origin attending a public school that is located in a large city or Paris and not in a ZEP. *Source:* Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Table A9 Social class effects on attendance at parents' evenings and parents' initiation of meetings and effects of educational aspiration and educational motivation (results of binary logistic regression; AMEs)

	Attendance at parents' evenings			Parents' initiation of meetings		
	Model 1 AME (SE)	Model 2 AME (SE)	Model 3 AME (SE)	Model 1 AME (SE)	Model 2 AME (SE)	Model 3 AME (SE)
<i>Social class</i> (Ref. EGP VI, VIIa)						
EGP I	0.018 (0.02)	0.003 (0.02)	0.011 (0.02)	0.090*** (0.02)	0.082*** (0.02)	0.079*** (0.02)
EGP II	0.031 (0.02)	0.017 (0.02)	0.028 (0.02)	0.087*** (0.02)	0.079*** (0.02)	0.082*** (0.02)
EGP III, V	0.033** (0.01)	0.024* (0.01)	0.031** (0.01)	0.013 (0.02)	0.007 (0.02)	0.010 (0.02)
EGP IVc, VIIIb	-0.002 (0.02)	-0.004 (0.02)	-0.003 (0.02)	-0.077* (0.03)	-0.081** (0.03)	-0.079* (0.03)
EGP IVa, IVb	0.028 (0.02)	0.018 (0.02)	0.026 (0.02)	0.001 (0.02)	-0.006 (0.02)	-0.002 (0.02)
<i>Parental education</i> (Ref. Lower)						
Intermediate	0.092*** (0.01)	0.079*** (0.01)	0.088*** (0.01)	0.028 (0.01)	0.020 (0.01)	0.023 (0.01)
Higher	0.121*** (0.01)	0.106*** (0.01)	0.115*** (0.01)	0.042* (0.02)	0.034 (0.02)	0.027 (0.02)
Parents' performance assessment	0.022*** (0.01)	0.006 (0.01)	0.019*** (0.01)	-0.129*** (0.01)	-0.138*** (0.01)	-0.134*** (0.01)
<i>Educational aspiration</i> (Ref. Apprenticeship / CAP / BEP)						
Professional <i>bac</i>		0.035* (0.02)			0.058** (0.02)	
Technological <i>bac</i>		0.073*** (0.02)			0.058* (0.03)	
General <i>bac</i>		0.087*** (0.02)			0.039* (0.02)	
General <i>bac</i> L/ES		0.081*** (0.02)			0.082*** (0.02)	
General <i>bac</i> S		0.080*** (0.02)			0.061** (0.02)	
<i>Educational motivation</i> (Ref. None)						
Intermediate			0.025* (0.01)			0.012 (0.02)
High			0.027** (0.01)			0.049*** (0.01)
<i>N</i>	7525	7525	7525	7491	7491	7491
<i>AIC</i>	5538.1	5500.0	5532.1	9069.4	9063.1	9059.0

Note: AME=average marginal effect; SE=standard error adjusted for school-level clustering; the coefficients of the control variables (school type, immigration background, city size) are omitted; * p<0.05; ** p<0.01; ***p<0.001. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Table A10 Social class effects on PA-membership and being Parent representative and effects of educational aspiration and educational motivation (results of binary logistic regression; AMEs)

	PA-membership			Parent representative in staff meetings		
	Model 1 AME (SE)	Model 2 AME (SE)	Model 3 AME (SE)	Model 1 AME (SE)	Model 2 AME (SE)	Model 3 AME (SE)
<i>Social class</i> (Ref. EGP VI, VIIa)						
EGP I	0.100*** (0.02)	0.090*** (0.02)	0.094*** (0.02)	0.057*** (0.01)	0.052** (0.01)	0.053*** (0.01)
EGP II	0.077*** (0.02)	0.068*** (0.02)	0.074*** (0.02)	0.048** (0.02)	0.043** (0.02)	0.047** (0.02)
EGP III, V	0.043** (0.01)	0.038* (0.01)	0.041** (0.01)	0.030* (0.01)	0.027* (0.01)	0.029* (0.01)
EGP IVc, VIIb	0.132*** (0.03)	0.131*** (0.03)	0.132*** (0.03)	0.093*** (0.03)	0.094*** (0.03)	0.094*** (0.03)
EGP IVa, IVb	0.050** (0.02)	0.044* (0.02)	0.048* (0.02)	0.030* (0.02)	0.027 (0.02)	0.029 (0.02)
<i>Parental education</i> (Ref. Lower)						
Intermediate	0.086*** (0.01)	0.082*** (0.01)	0.085*** (0.01)	0.064*** (0.01)	0.061*** (0.01)	0.063*** (0.01)
Higher	0.201*** (0.01)	0.189*** (0.01)	0.193*** (0.02)	0.121*** (0.01)	0.115*** (0.01)	0.117*** (0.01)
Parents' performance assessment (<i>p</i>)	0.020*** (0.01)	0.011 (0.01)	0.017** (0.01)	0.020*** (0.00)	0.013* (0.01)	0.018*** (0.00)
<i>Educational aspiration</i> (Ref. Apprentic. / CAP / BEP)						
Professional <i>bac</i>		0.004 (0.02)			-0.004 (0.02)	
Technological <i>bac</i>		0.058* (0.02)			0.028 (0.02)	
General <i>bac</i>		0.065*** (0.02)			0.030* (0.01)	
General <i>bac</i> L/ES		0.059** (0.02)			0.038* (0.02)	
General <i>bac</i> S		0.055** (0.02)			0.038* (0.02)	
<i>Educational motivation</i> (Ref. None)						
Intermediate			0.015 (0.02)			0.008 (0.01)
High			0.028** (0.01)			0.018* (0.01)
<i>N</i>	7530	7530	7530	7533	7533	7533
<i>AIC</i>	6616.5	6605.7	6613.5	4957.3	4955.9	4956.8

Note: AME=average marginal effect; the coefficients of the control variables (school type, immigration background, city size) are omitted; concomitant variables are immigration origin, school types and city size; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. *Source*: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Table A11 Decomposing social class effects on opinion on parent-teacher relationship into direct effects and indirect effects via parental education; AMEs.

Decomposing social class (Ref. EGPVI, VIIa)	EGPI	EGPII	EGPIII, V	EGPIVc, VIIb	EGPIVa, IVb
<i>Meet when problem vs. better not meet</i>					
<i>Total effect</i>	0.083***	0.077**	0.073***	0.023	0.058*
<i>Direct effect</i>	-0.004	0.002	0.038*	-0.011	0.021
<i>Indirect effect</i>	0.087	0.075	0.035	0.035	0.038
Confounding percentage	104.79	98.00	47.87	148.54	64.65
N	4917				
<i>Meet frequently vs. better not meet</i>					
<i>Total effect</i>	0.102***	0.120***	0.072***	0.036	0.057**
<i>Direct effect</i>	0.006	0.038	0.035*	-0.009	0.012
<i>Indirect effect</i>	0.096	0.083	0.037	0.045	0.045
Confounding percentage	94.34	68.85	51.56	125.49	78.50
N	6312				

Note: AME=average marginal effect, LGT= general track, LPA=vocational track; estimates obtained with Stata-command “khh” (Kohler, Karlson and Holm 2011); concomitant variables are French origin, school types and city size. Standard errors are adjusted for school-level clustering. *Source:* Panel national 1995 d’élèves du second degré, Ministère de l’Éducation nationale, DPD; own calculations.

Table A12 Descriptives of variables used in the analysis of family's school track request

	EGP I	EGP II	EGP III, V	EGP VI, VIIa	EGP IVc, VIIb	EGP IVa, IVb	Total
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
<i>Family's school track request</i>							
LGT	0.94	0.87	0.68	0.50	0.65	0.71	0.73
LPA	0.06	0.13	0.32	0.50	0.35	0.29	0.27
Parents' performance assessment (<i>p</i>)	2.94 (0.77)	2.80 (0.76)	2.54 (0.78)	2.47 (0.76)	2.74 (0.71)	2.56 (0.77)	2.66 (0.79)
Number of siblings (<i>C</i>)	1.63 (1.01)	1.59 (1.06)	1.58 (1.08)	2.43 (1.81)	1.89 (1.18)	1.63 (1.21)	1.78 (1.30)
No parent working (<i>C</i>)	0.02	0.02	0.05	0.14	0.04	0.04	0.06
<i>Educational motivation (c*SD)</i>							
None	0.22	0.38	0.54	0.65	0.57	0.51	0.47
Intermediate	0.07	0.10	0.14	0.15	0.13	0.13	0.12
High	0.71	0.52	0.32	0.20	0.29	0.36	0.41
Mark	12.41 (2.53)	12.05 (2.54)	11.01 (2.70)	10.17 (2.68)	11.63 (2.68)	10.90 (2.59)	11.30 (2.75)
Previous grade repetition	0.09	0.13	0.23	0.28	0.17	0.21	0.19
Parents' evenings	0.92	0.92	0.88	0.80	0.86	0.89	0.88
Parents' initiation of meetings	0.37	0.37	0.31	0.26	0.20	0.31	0.32
Teacher's initiation of meetings	0.14	0.15	0.17	0.21	0.12	0.18	0.17
PA-membership	0.33	0.26	0.13	0.06	0.20	0.14	0.18
<i>Opinion on parent- teacher relationship</i>							
Better not meet	0.10	0.09	0.11	0.18	0.15	0.12	0.12
Meet when problem	0.36	0.32	0.39	0.37	0.36	0.39	0.37
Meet frequently	0.54	0.59	0.49	0.45	0.50	0.50	0.51
<i>Parental education</i>							
Higher	0.80	0.61	0.12	0.01	0.17	0.20	0.33
Intermediate	0.16	0.32	0.48	0.25	0.52	0.46	0.34
Lower	0.04	0.07	0.40	0.74	0.31	0.34	0.33
Knowledge of right to reject	0.88	0.88	0.82	0.72	0.81	0.80	0.82
French origin	0.79	0.83	0.80	0.70	0.90	0.77	0.78
Private school	0.27	0.20	0.17	0.15	0.35	0.29	0.21
ZEP-school	0.03	0.06	0.09	0.17	0.05	0.06	0.09
<i>City size</i>							
< 5,000 inh.	0.12	0.21	0.20	0.24	0.56	0.23	0.21
5,000-20,000 inh.	0.12	0.18	0.19	0.20	0.26	0.21	0.18
20,000-200,000 inh.	0.25	0.30	0.27	0.28	0.15	0.25	0.26
>200,000 inh., Paris	0.51	0.32	0.34	0.28	0.04	0.31	0.35
<i>N</i>	1984	1214	2878	1798	309	819	9002

Note: SD=standard deviation; standard deviations of binary variables are omitted. Due to rounding means not always sum up to 1. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Table A13 *Decomposing social class effects on family's school track request (LGT vs. LPA) into direct effects and indirect effects via the decision-making parameters p , C and $c*SD$ (AMEs).*

Decomposing social class (Ref. EGPVI, VIIa)	EGPI	EGPII	EGPIII, V	EGPIVc, VIIb	EGPIVa, IVb
<i>Total effect</i>	0.431***	0.360***	0.177***	0.176***	0.210***
<i>Direct effect</i>	0.260***	0.203***	0.101***	0.055*	0.121***
<i>Indirect effect</i>	0.172	0.156	0.077	0.121	0.089
Confounding percentage	39.79	43.48	42.94	68.76	42.52
N	9002				

Note: AME=average marginal effect, LGT= general track, LPA=vocational track; estimates obtained with Stata-command “khh” (Kohler, Karlson and Holm 2011); concomitant variables are French origin, school types and city size. Standard errors are adjusted for school-level clustering. *Source:* Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Table A14 *Decomposing of social class effects on family's school track request (LGT vs. LPA) into direct effects and indirect effects via effects via the decision-making parameters p , C and $c*SD$ and student's marks, parents' cultural capital and their involvement; AMEs.*

Decomposing social class (Ref. EGPVI, VIIa)	EGPI	EGPII	EGPIII, V	EGPIVc, VIIb	EGPIVa, IVb
<i>Total effect</i>	0.424***	0.351***	0.180***	0.170***	0.211***
<i>Direct effect</i>	0.139***	0.084***	0.048***	-0.013	0.069***
<i>Indirect effect</i>	0.285	0.266	0.132	0.182	0.142
Confounding percentage	67.23	76.31	73.32	107.96	67.36
N	9002				

Note: AME=average marginal effect, LGT= general track, LPA=vocational track; estimates obtained with Stata-command “khh” (Kohler, Karlson and Holm 2011); concomitant variables are French origin, school types and city size. Standard errors are adjusted for school-level clustering. *Source:* Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Table A15 Interaction effects of the decision-making parameters on family's school track request (LGT vs. LPA)

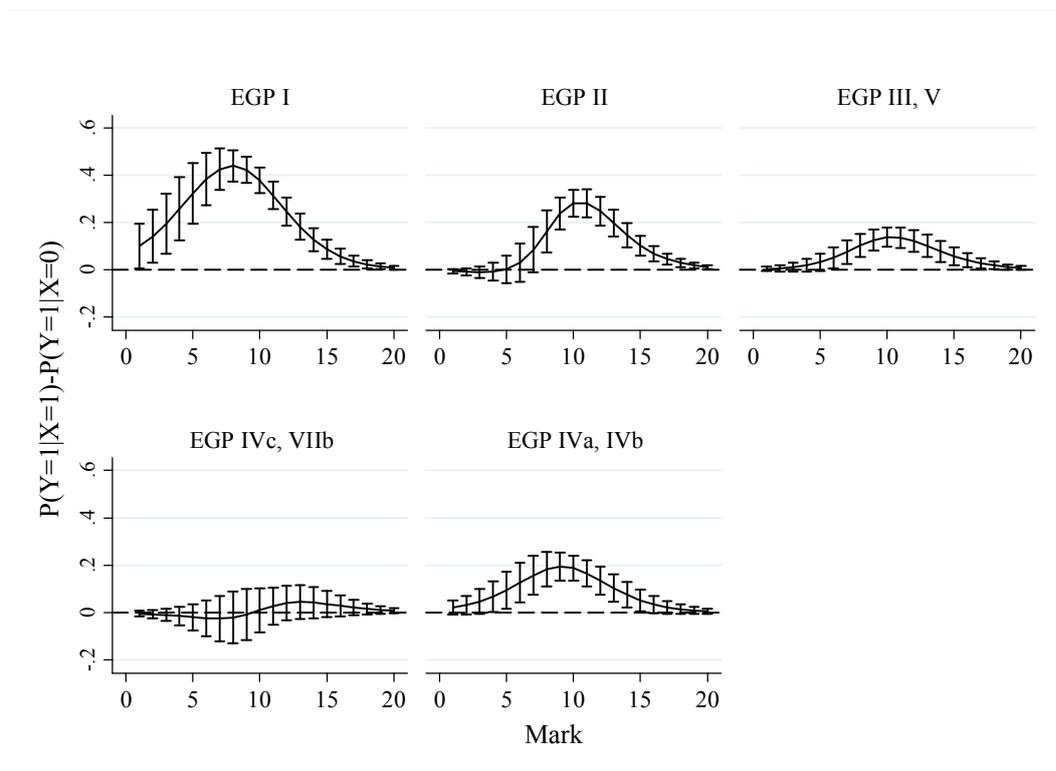
	Model 1 Logit (SE)	Model 2 Logit (SE)	Model 3 Logit (SE)	Model 4 Logit (SE)
<i>Social class</i> (Ref. EGPVI, VIIa)				
EGPI	1.899*** (0.14)	2.494*** (0.63)	1.921*** (0.14)	1.403*** (0.16)
EGPII	1.266*** (0.13)	-1.246 (0.88)	1.271*** (0.13)	0.806*** (0.14)
EGPIII, V	0.600*** (0.09)	0.205 (0.44)	0.590*** (0.09)	0.449*** (0.09)
EGPIVc, VIIb	0.073 (0.18)	-0.766 (1.00)	0.089 (0.17)	-0.145 (0.18)
EGPIVa, IVb	0.831*** (0.13)	1.097 (0.61)	0.828*** (0.13)	0.642*** (0.13)
Parents' performance assessment (<i>p</i>)	-0.291 (0.25)	0.614*** (0.06)	0.607*** (0.06)	0.603*** (0.06)
Number of siblings (<i>C</i>)	-0.076** (0.03)	-0.079** (0.03)	-0.077** (0.03)	-0.067* (0.03)
No parent working (<i>C</i>)	-0.098 (0.14)	-0.127 (0.14)	-0.109 (0.14)	0.050 (0.14)
<i>Educational motivation</i> (<i>c</i> *SD) (Ref. None)				
Intermediate	0.599*** (0.09)	0.604*** (0.09)	-0.271 (0.50)	0.575*** (0.10)
High	1.349*** (0.09)	1.365*** (0.09)	-0.167 (0.49)	1.251*** (0.09)
Previous grade repetition	-1.271*** (0.08)	-1.308*** (0.08)	-1.302*** (0.08)	-1.280*** (0.08)
Mark	0.311*** (0.06)	0.487*** (0.03)	0.476*** (0.02)	0.430*** (0.04)
<i>Parental education</i> (Ref. lower)				
Intermediate				0.361*** (0.08)
Higher				0.738*** (0.13)
Parents' evenings				-1.099* (0.45)
Parent's initiation of meetings				0.631 (0.40)
Teacher's initiation of meetings				0.846* (0.43)
PA-membership				-0.190 (0.60)
Interactions with Mark				
Mark * Parents' performance assessment (<i>p</i>)	0.089*** (0.03)			
Mark * Parents' evenings				0.139** (0.04)
Mark * Parents' initiation of meetings				-0.048 (0.04)
Mark * Teachers' initiation of meetings				-0.108* (0.04)
Mark * PA-membership				0.046

Table A15 continued

	(0.06)			
<i>Social class</i>				
(Ref. Mark * EGPVI, VIIa)				
Mark * EGPI		-0.060		
		(0.06)		
Mark * EGPII		0.254**		
		(0.09)		
Mark * EGPIII, V		0.039		
		(0.04)		
Mark * EGPIVc, VIIb		0.080		
		(0.09)		
Mark * EGPIVa, IVb		-0.028		
		(0.06)		
<i>Educational motivation</i>				
(Ref. Mark * None)				
Mark * Intermediate			0.087	
			(0.05)	
Mark * High			0.156**	
			(0.05)	
Constant	-3.666***	-5.407***	-5.264***	-5.167***
	(0.60)	(0.34)	(0.26)	(0.47)
<i>N</i>	9002	9002	9002	9002
<i>AIC</i>	5707.1	5711.3	5709.4	5642.2

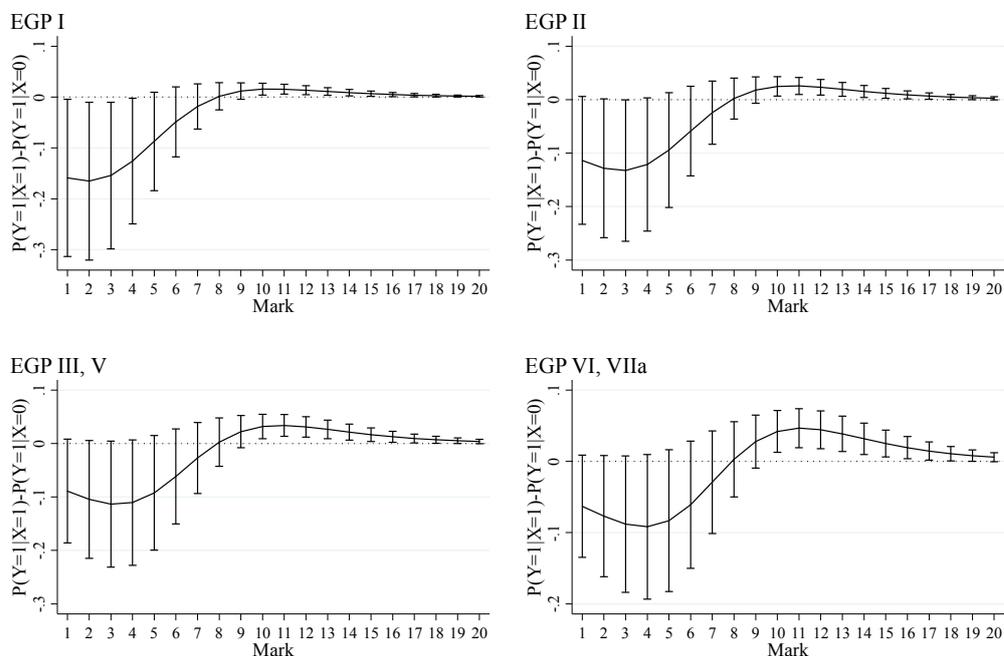
Note: SE=standard error adjusted for school-level clustering; * p<0.05; ** p<0.01; ***p<0.001. *Source:* Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Figure A3 Interaction of mark and social class on family's school track request (LGT vs. LPA); discrete change effects of social class (reference: EGP VI, VIIa), parent's performance assessment held constant at 1



Note: LGT=general track, LPA=vocational track; estimates obtained from Model 2 in Table A15; probabilities are calculated for students of French origin with parents with intermediate educational motivation and higher education who assessed student's performance as very low, having not repeated grades, attending a public school that is located in a large city or Paris and not in a ZEP, having an average number of siblings and at least one working parent; 95%-confidence intervals. *Source:* Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Figure A4 Interaction of mark and attendance at parents' evenings on family's school track request (LGT vs. LPA) by social class; discrete change effects of attendance at parents' evenings



Note: LGT=general track, LPA=vocational track; estimates obtained from Model 4 in Table A15; probabilities calculated for students of French origin with parents with intermediate educational motivation and higher education who assessed student's performance with "3", having not repeated grades, attending a public school that is located in a large city or Paris and not in a ZEP-program, having an average number of siblings and at least one working parent; 95%-confidence intervals. *Source:* Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Table A16 Means of variables used in analysis of family's rejection decision

	EGP I Mean	EGP II Mean	EGP III, V Mean	EGP VI, VIIa Mean	EGP IVc, VIIb Mean	EGP IVa, IVb Mean	Total Mean
<i>Social class</i>							
EGP I							0.24
EGP II							0.10
EGP III, V							0.32
EGP VI, VIIa							0.19
EGP IVc, VIIb							0.02
EGP IVa, IVb							0.13
Family's rejection	0.38	0.39	0.33	0.27	0.20	0.33	0.34
French origin	0.77	0.80	0.75	0.53	0.80	0.72	0.71
Private school	0.38	0.25	0.28	0.24	0.53	0.34	0.30
ZEP-school	0.03	0.10	0.10	0.15	0.00	0.06	0.08
<i>City size</i>							
< 5,000 inh.	0.05	0.14	0.14	0.17	0.53	0.15	0.13
5,000-20,000 inh.	0.11	0.18	0.14	0.18	0.07	0.25	0.15
20,000-200,000 inh.	0.26	0.24	0.26	0.25	0.20	0.18	0.25
>200,000 inh., Paris	0.58	0.45	0.46	0.40	0.20	0.42	0.47
<i>Parental education</i>							
Lower	0.66	0.56	0.12	0.02	0.33	0.19	0.29
Intermediate	0.26	0.30	0.46	0.20	0.53	0.38	0.34
Higher	0.08	0.14	0.43	0.78	0.13	0.43	0.38
<i>N</i>	238	102	311	190	15	126	982

Note: Due to rounding means not always sum up to 1. *Source:* Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Table A17 Descriptives of variables used in analysis of staff meeting's proposition (means, standard deviations in parentheses)

	EGP I Mean (SD)	EGP II Mean (SD)	EGP III, V Mean (SD)	EGP VI, VIIa Mean (SD)	EGP IVc, VIIb Mean (SD)	EGP IVa, IVb Mean (SD)	Total Mean (SD)
<i>Social class</i>							
EGP I							0.20
EGP II							0.13
EGP III, V							0.32
EGP VI, VIIa							0.22
EGP IVc, VIIb							0.04
EGP IVa, IVb							0.09
Staff meeting's proposition: LGT (1) vs. LPA (0)	0.90	0.82	0.61	0.42	0.61	0.63	0.66
French origin	0.79	0.83	0.80	0.67	0.89	0.76	0.77
Private school	0.26	0.20	0.18	0.13	0.33	0.29	0.20
ZEP-school	0.03	0.06	0.10	0.19	0.04	0.07	0.10
<i>City size</i>							
< 5,000 inhabitants	0.13	0.20	0.20	0.24	0.56	0.24	0.21
5,000-20,000	0.13	0.18	0.19	0.20	0.24	0.21	0.18
20,000-200,000	0.25	0.30	0.26	0.28	0.16	0.26	0.26
>200,000, inh., Paris	0.50	0.31	0.35	0.29	0.03	0.30	0.34
Mark	12.56 (2.46)	12.08 (2.54)	10.97 (2.74)	10.03 (2.68)	11.51 (2.67)	10.87 (2.60)	11.24 (2.78)
Previous grade repetition	0.10	0.14	0.26	0.32	0.19	0.24	0.22
<i>Family's school track request</i>							
LGT	0.93	0.85	0.65	0.47	0.62	0.69	0.69
LPA	0.07	0.15	0.35	0.53	0.38	0.31	0.31
GR	0.00	0.00	0.00	0.00	0.00	0.01	0.00
Parents' evenings	0.91	0.91	0.86	0.77	0.85	0.87	0.85
Parents' initiation of meetings	0.36	0.37	0.32	0.29	0.20	0.31	0.32
Teachers' initiation of meetings	0.13	0.14	0.17	0.21	0.13	0.17	0.17
PA-membership	0.31	0.25	0.12	0.05	0.18	0.14	0.17
<i>Parental education</i>							
Lower	0.04	0.08	0.42	0.74	0.34	0.34	0.36
Intermediate	0.16	0.32	0.46	0.25	0.50	0.46	0.34

Table A17 continued

Higher	0.80	0.61	0.12	0.01	0.16	0.19	0.30
<i>Education of involved parent</i>							
Tertiary degree	0.64	0.47	0.08	0.01	0.07	0.13	0.23
Baccalauréat	0.18	0.28	0.18	0.04	0.20	0.17	0.16
Vocational qualification	0.12	0.18	0.50	0.41	0.46	0.46	0.36
Elementary education	0.02	0.02	0.17	0.40	0.17	0.16	0.17
Other or no person involved	0.04	0.04	0.08	0.15	0.10	0.08	0.08
<i>N</i>	2130	1316	3378	2308	378	956	10466

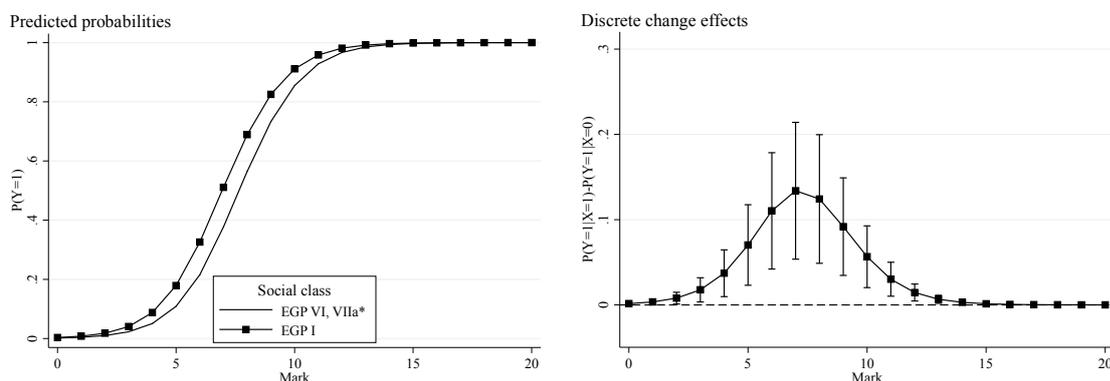
Note: Due to rounding means not always sum up to 1. *Source:* Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Table A18 Decomposing social class effects on staff meeting's school track propositions (LGT vs. LPA) into direct effects and indirect effects via student's performance and family's school track request; AMEs

Decomposing social class (Ref. EGPVI, VIIa)	EGPI	EGPII	EGPIII, V	EGPIVc, VIIb	EGPIVa, IVb
Total effect	0.351***	0.292***	0.169***	0.207***	0.177***
Direct effect	0.022**	0.012	0.011*	0.021	0.008
Indirect effect	0.328	0.281	0.158	0.185	0.169
Confounding percentage	93.69	96.08	93.35	89.81	95.60
N	10466				

Note: AME=average marginal effect, LGT= general track, LPA=vocational track; estimates obtained with Stata-command "khh" (Kohler, Karlson and Holm 2011); concomitant variables are French origin, school types and city size. Standard errors are adjusted for school-level clustering. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Figure A5 Predicted probabilities and discrete change effects of receiving an LGT-proposition by marks for families from the higher service class and the working class who requested LGT



Note: LGT=general track, LPA=vocational track; estimates obtained from Model 4 in Table 20; probabilities are calculated for students of French origin with parents with intermediate educational motivation, having not repeated grades, attending a public school that is located in a large city or Paris and not in a ZEP, having an average number of siblings and at least one working parent; 95%-confidence intervals. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Table A19 Effect of being parent representative and PA-membership on staff meeting's proposition (LGT versus LPA); results of binary logistic regression; AMEs

	Model 1		Model 2		Model 3	
	AME	(SE)	AME	(SE)	AME	(SE)
<i>Social class</i>						
(Ref. EGP VI, VIIa)						
EGP I	0.022***	(0.01)	0.025***	(0.01)	0.022***	(0.01)
EGP II	0.011	(0.01)	0.012	(0.01)	0.011	(0.01)
EGP III, V	0.011	(0.01)	0.011	(0.01)	0.011	(0.01)
EGP IVc, VIIb	0.020	(0.01)	0.022	(0.01)	0.020	(0.01)
EGP IVa, IVb	0.006	(0.01)	0.007	(0.01)	0.006	(0.01)
Mark on <i>brevet</i>	0.027***	(0.00)	0.027***	(0.00)	0.027***	(0.00)
Previous grade repetition	-0.050***	(0.01)	-0.050***	(0.01)	-0.050***	(0.01)
Family's request: LGT vs. LPA	0.669***	(0.02)	0.671***	(0.02)	0.669***	(0.02)
Parents' evenings	0.001	(0.01)	0.002	(0.01)	0.001	(0.01)
Parents' initiation of meetings	-0.009*	(0.00)	-0.009*	(0.00)	-0.009*	(0.00)
Teachers' initiation of meetings	-0.013**	(0.00)	-0.012**	(0.00)	-0.013**	(0.00)
PA-membership	0.021***	(0.01)			0.019**	(0.01)
Parent representative			0.018**	(0.01)	0.005	(0.01)
<i>N</i>	8970		8970		8970	
<i>AIC</i>	2071.5		2080.2		2073.1	

Note: AME=average marginal effect; SE=standard error adjusted for school-level clustering; * p<0.05; ** p<0.01; ***p<0.001. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Table A20 Interaction effects of family's school track request and marks, parental education and education of involved parent on staff meeting's proposition (results of binary logistic regression)

	Model 1		Model 2		Model 3	
	Logit	(SE)	Logit	(SE)	Logit	(SE)
<i>Social class</i> (Ref. EGP VI, VIIa)						
EGP I	0.591**	(0.19)	0.144	(0.22)	0.194	(0.22)
EGP II	0.257	(0.20)	-0.116	(0.22)	-0.081	(0.22)
EGP III, V	0.251	(0.15)	0.117	(0.15)	0.179	(0.15)
EGP IVc, VIIb	0.668	(0.36)	0.491	(0.37)	0.545	(0.35)
EGP IVa, IVb	0.202	(0.20)	0.014	(0.20)	0.078	(0.19)
Mark	0.517***	(0.04)	0.833***	(0.03)	0.839***	(0.03)
Previous grade repetition	-1.432***	(0.12)	-1.460***	(0.12)	-1.450***	(0.12)
Family's request: LGT (1) vs. LPA (0)	1.574*	(0.65)				
<i>Parental education</i> (Ref. Lower)						
Intermediate			0.393	(0.31)		
Lower			-0.866	(0.83)		
<i>Education of involved parent</i> (Ref. Tertiary)						
Bac					2.025	(1.25)
Voc. Qual.					1.832	(1.18)
Elementary					1.677	(1.20)
No parent inv.					2.020	(1.23)
<u>Interactions with family's request</u>						
Family's request * Mark	0.434***	(0.06)				
<i>Parental education</i> (Ref. Family's request * Lower)						
Family's request * Intermediate			0.110	(0.34)		
Family's request * Higher			1.695*	(0.83)		
<i>Education of involved parent</i> (Ref. Family's request * Tertiary)						
Family's request * Bac					-2.233	(1.26)
Family's request * Vocational quali.					-2.537*	(1.19)
Family's request * Elementary quali.					-2.597*	(1.21)
Family's request * No/other pers. involved					-2.350	(1.25)
Constant	-8.583***	(0.50)	-12.197***	(0.48)	-14.010***	(1.27)
<i>N</i>	10466		10466		10466	
<i>AIC</i>	2599.6		2609.3		2615.3	

Note: SE=standard error adjusted for school-level clustering; * p<0.05; ** p<0.01; ***p<0.001. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations. Control variables are included but not shown.

Table A21 Descriptives of variables in analysis of family's retention decision (means, standard deviations in parentheses)

	EGP I Mean (SD)	EGP II Mean (SD)	EGP III, V Mean (SD)	EGP VI, VIIa Mean (SD)	EGP IVc, VIIb Mean (SD)	EGP IVa, IVb Mean (SD)	Total Mean (SD)
<i>Social class</i>							
EGP I							0.05
EGP II							0.06
EGP III, V							0.37
EGP IVc, VIIb							0.05
EGP IVa, IVb							0.09
EGP VI, VIIa							0.37
<i>Family's request: LPA</i>	0.81	0.86	0.92	0.97	0.95	0.92	0.93
GR	0.19	0.14	0.08	0.03	0.05	0.08	0.07
Parents' performance assessment (p)	1.96 (0.65)	2.07 (0.70)	2.02 (0.64)	2.13 (0.69)	2.28 (0.64)	2.09 (0.71)	2.08 (0.67)
Number of siblings (C)	1.76 (1.22)	1.70 (1.04)	1.75 (1.21)	2.53 (1.82)	2.27 (1.83)	1.77 (1.22)	2.07 (1.53)
No parent working (C)	0.04	0.06	0.07	0.16	0.10	0.07	0.10
<i>Educational motivation (c*SD)</i>							
None	0.55	0.58	0.71	0.75	0.79	0.73	0.71
Intermediate	0.11	0.13	0.15	0.14	0.11	0.16	0.14
High	0.34	0.29	0.14	0.11	0.10	0.11	0.14
Mark	9.07 (2.32)	8.78 (2.12)	8.83 (2.20)	8.62 (2.24)	9.56 (2.20)	8.87 (2.19)	8.80 (2.22)
Previous grade repetition	0.45	0.45	0.47	0.44	0.39	0.46	0.45
French origin	0.85	0.81	0.81	0.71	0.84	0.80	0.77
Private school	0.28	0.23	0.17	0.14	0.33	0.27	0.19
ZEP-school	0.07	0.07	0.11	0.19	0.03	0.07	0.13
City size: < 5,000 inh.	0.18	0.22	0.23	0.25	0.53	0.28	0.25
5,000-20,000 inh.	0.21	0.18	0.20	0.20	0.29	0.26	0.21
20,000-200,000 inh.	0.26	0.29	0.26	0.27	0.16	0.25	0.26
>200,000 inh., Paris	0.35	0.32	0.31	0.27	0.02	0.22	0.28
<i>N</i>	181	231	1347	1348	166	337	3610

Note: Due to rounding means not always sum up to 1. Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Table A22 *Decomposing social class differentials in family's decision to request GR instead of LPA into direct effects and indirect effects via economic situation, educational motivation and previous grade repetition; AMEs.*

Decomposing social class (Ref. EGPVI, VIIa)	EGPI	EGPII	EGPIII, V	EGPIVc, VIIb	EGPIVa, IVb
<i>Total effect</i>	0.164***	0.105***	0.051***	0.027	0.052***
<i>Direct effect</i>	0.130***	0.079***	0.050***	0.025	0.049**
<i>Indirect effect</i>	0.034	0.026	0.002	0.002	0.003
Confounding percentage	21.91	23.23	3.21	19.36	3.92
N	3610				

Note: AME=average marginal effect, LGT= general track, LPA=vocational track; estimates obtained with Stata-command “khh” (Kohler, Karlson and Holm 2011); concomitant variables are French origin, school types and city size. Standard errors are adjusted for school-level clustering. *Source:* Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Table A23 Descriptives of variables used in analysis of staff meeting's retention proposition (means, standard deviations in parentheses)

	EGP I Mean (SD)	EGP II Mean (SD)	EGP III, V Mean (SD)	EGP VI, VIIa Mean (SD)	EGP IVc, VIIIb Mean (SD)	EGP IVa, IVb Mean (SD)	Total Mean (SD)
<i>Social class</i>							
EGP I							0.09
EGP II							0.07
EGP III, V							0.36
EGP IVc, VIIIb							0.04
EGP IVa, IVb							0.10
EGP IVa, IVb							0.34
<i>Staff meeting's proposition</i>							
LPA	0.51	0.75	0.83	0.93	0.90	0.83	0.83
GR	0.49	0.25	0.17	0.07	0.10	0.17	0.17
<i>Family's school track request</i>							
LGT	0.57	0.30	0.19	0.12	0.09	0.27	0.21
LPA	0.34	0.60	0.75	0.85	0.87	0.67	0.73
GR	0.09	0.10	0.07	0.03	0.04	0.06	0.06
Mark	9.05 (1.78)	9.00 (1.91)	8.86 (2.09)	8.65 (2.18)	9.42 (2.19)	8.74 (2.02)	8.82 (2.08)
Previous grade repetition	0.33	0.40	0.44	0.43	0.36	0.42	0.42
<i>Parental education</i>							
Lower	0.11	0.16	0.52	0.79	0.51	0.46	
Intermediate	0.29	0.36	0.40	0.21	0.42	0.43	0.54
Higher	0.60	0.48	0.07	0.01	0.08	0.11	0.33
<i>Education of involved parent</i>							
Tertiary degree	0.43	0.40	0.05	0.00	0.04	0.06	0.10
Baccalauréat	0.23	0.23	0.12	0.03	0.15	0.14	0.11
Vocational qualification	0.25	0.31	0.52	0.39	0.45	0.50	0.43
Elementary education	0.05	0.04	0.22	0.41	0.25	0.22	0.26
Other or no person involved	0.03	0.03	0.09	0.16	0.10	0.08	0.10
Parents' evenings	0.86	0.88	0.81	0.73	0.79	0.82	0.79

Table A23 continued

Parents' initiation of meetings	0.55	0.53	0.40	0.33	0.24	0.40	0.39
Teachers' initiation of meetings	0.28	0.30	0.28	0.27	0.23	0.28	0.28
PA-membership	0.22	0.19	0.09	0.05	0.11	0.11	0.10
French origin	0.80	0.82	0.80	0.69	0.85	0.78	0.76
Private school	0.34	0.24	0.19	0.15	0.36	0.30	0.21
ZEP-school	0.04	0.08	0.10	0.18	0.03	0.06	0.12
<i>City size</i>							
< 5,000 inh.	0.11	0.19	0.21	0.24	0.53	0.25	0.23
5,000-20,000 inh.	0.15	0.18	0.19	0.20	0.26	0.26	0.20
20,000-200,000 inh.	0.26	0.28	0.26	0.27	0.17	0.23	0.26
>200,000, inh., Paris	0.48	0.36	0.34	0.29	0.04	0.27	0.32
<i>N</i>	409	326	1614	1501	168	447	4465

Note: Due to rounding means not always sum up to 1. *Source:* Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Table A24 *Decomposing of social class differentials in staff meeting's decision to propose LGT instead of LPA into direct effects and indirect effects via family's request, previous grade repetition, student's mark, parental education and involvement; AMEs.*

Decomposing social class (Ref. EGPVI, VIIa)	EGPI	EGPII	EGPIII, V	EGPIVc, VIIb	EGPIVa, IVb
<i>Total effect</i>	0.276***	0.106***	0.060***	0.023	0.054***
<i>Direct effect</i>	0.050***	0.012	0.032**	0.013	0.004
<i>Indirect effect</i>	0.226	0.094	0.028	0.011	0.049
Confounding percentage	81.96	88.72	46.33	46.05	91.99
N	4465				

Note: AME=average marginal effect, LGT= general track, LPA=vocational track; estimates obtained with Stata-command “khh” (Kohler, Karlson and Holm 2011); concomitant variables are French origin, school types and city size. Standard errors are adjusted for school-level clustering. *Source:* Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.

Table A25 Determinants of family's request and staff meeting's proposition: LGT, LPA, GR (results of multinomial logistic regression; logits)

Dependent variable	Model 1		Model 2	
	<i>Family's request</i>		<i>Staff meeting's proposition</i>	
	LGT vs. LPA	GR vs. LPA	LGT vs. LPA	GR vs. LPA
	Logit (SE)	Logit (SE)	Logit (SE)	Logit (SE)
<i>Social class</i> (Ref. EGPVI, VIIa)				
EGPI	2.318*** (0.11)	2.431*** (0.26)	0.641*** (0.18)	1.474*** (0.22)
EGPII	1.455*** (0.10)	1.859*** (0.26)	0.245 (0.18)	0.570* (0.24)
EGPIII, V	0.611*** (0.07)	1.268*** (0.20)	0.280* (0.14)	0.745*** (0.18)
EGPIVc, VIIb	0.089 (0.13)	0.565 (0.40)	0.757* (0.33)	0.801 (0.48)
EGPIVa, IVb	1.005*** (0.10)	1.234*** (0.26)	0.045 (0.18)	0.295 (0.25)
French origin	-0.576*** (0.07)	-0.203 (0.17)	-0.112 (0.12)	0.066 (0.15)
Private school	-0.243** (0.08)	-0.299 (0.19)	-0.671*** (0.13)	0.120 (0.15)
ZEP-school	-0.147 (0.09)	-0.202 (0.23)	-0.156 (0.18)	-0.556* (0.24)
<i>City size</i> (Ref. >200,000 inh., Paris)				
< 5,000 inhabitants	-0.877*** (0.09)	-0.046 (0.21)	-0.171 (0.16)	-0.454* (0.21)
5,000-20,000	-0.660*** (0.09)	0.287 (0.20)	-0.177 (0.15)	-0.216 (0.19)
20,000-200,000	-0.359*** (0.08)	0.287 (0.18)	0.134 (0.13)	0.037 (0.16)
Mark	0.600*** (0.02)	-0.144*** (0.02)	0.906*** (0.03)	-0.161*** (0.04)
Previous grade repetition	-1.502*** (0.07)	-2.599*** (0.24)	-1.428*** (0.11)	-2.424*** (0.18)
<i>Family's request</i> (Ref. LGT)				
LPA			-6.559*** (0.20)	-4.699*** (0.22)
GR			-3.172*** (0.69)	2.531*** (0.28)
Constant	-4.806***	-1.698***	-6.568***	1.437***
<i>N</i>	11838		11838	

Note: LGT=general track, LPA= vocational track, GR=grade retention; SE=standard error adjusted for school-level clustering; *p<0.05; **p<0.01; ***p<0.001; Source: Panel national 1995 d'élèves du second degré, Ministère de l'Éducation nationale, DPD; own calculations.