Implicit and explicit attitudes toward Turkish students in Germany as a function of teachers' ethnicity

Kleen, Hannah[1]; Bonefeld, Meike[2]; Glock, Sabine[1]; Dickhäuser, Oliver[2]

[1]University of Wuppertal
[2]University of Mannheim

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Abstract

A large number of educational systems face the challenges of dealing with students from different ethnic minorities and providing equal opportunities for them. In Germany, Turkish students belong to the largest ethnic minority group and display the lowest levels of academic achievement in comparison with most other ethnic minority or German students. Teachers' attitudes toward Turkish students might contribute to the disadvantages of this social group. The aim of this study was to assess preservice teachers' implicit and explicit attitudes toward Turkish students. Previous research has focused primarily on the attitudes of ethnic majority teachers. Drawing on potential benefits of a cultural match between teachers and students, we considered ethnic majority preservice teachers, preservice teachers with a Turkish background, and those with other ethnic minority backgrounds. Results showed no differences in explicit attitudes but significant differences in implicit attitudes depending on teachers' ethnic background. Preservice teachers with Turkish backgrounds showed positive implicit attitudes toward Turkish students, preservice teachers from other ethnic minority backgrounds had more neutral attitudes, whereas German preservice teachers had negative implicit attitudes toward Turkish students. Findings are discussed in terms of the cultural match between students and teachers and the benefits of a culturally diverse teaching workforce.

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1 Introduction

In many educational systems around the world, the cultural diversity of the student body has increased in recent years, for example in the US, as well as in European countries. In the US, 23.1 % of students had an immigrant background in 2015 (OECD 2016). This percentage varies in European countries. While, for example, in Luxembourg 52 % of all students were ethnic minority students, in Austria 20.3 % and in Spain 11 % were ethnic minority students in 2015 (OECD 2016). Regardless of the different shares of ethnic minority students, in all these countries the percentage of these students increased since 2006 (OECD 2016). The same situation holds for Germany, where 16.9 % of all students were from ethnic minorities in 2015 (OECD 2016). Ethnic minority students experience many disadvantages in school, they, for instance, drop out of school more often (Rumberger 1995), are overrepresented in lower and underrepresented in higher school tracks (Baumert and Schümer 2002; Kristen and Granato 2007), they get recommended to lower school tracks more often (Glock et al. 2013b), and their scholastic achievements tend to be lower than those of their ethnic majority peers (Haycock 2001; Dee 2005).

One possible explanation for these disadvantages, besides students' actual performances and their different native languages, might be teachers' expectations of students (Dee 2005; Jacoby-Senghor et al. 2016). Some studies have found that teachers expect ethnic minority students to show lower achievement than their ethnic majority peers (Rubie-Davies et al. 2006; Tenenbaum and Ruck 2007). Consequentially, these lower expectations have been found to be reflected in teachers' judgments of students (Ready and Wright 2011; Glock and Krolak-Schwerdt 2013; Glock 2016) as well as in their classroom behavior (Tenenbaum and Ruck 2007). Such expectations often derive from stereotypes (Jussim et al. 1996), which

are related to prejudice (Devine 1989). Positive or negative attitudes play a pivotal role in determining behavior and judgments (Olson and Fazio 2009a). In this vein, teachers' attitudes toward ethnic minority students have been shown to be related to these teachers' judgments and behavior (van den Bergh et al. 2010; Kumar et al. 2015), and studies have found that these attitudes have mostly been negative (van den Bergh et al. 2010; Glock et al. 2013a; Glock and Karbach 2015; Kumar et al. 2015; Glock and Klapproth 2017).

Until now, however, studies have assessed mostly ethnic majority teachers' attitudes. This focus of research might have simply been due to the lack of ethnic minority teachers. Ethnic diversity among teacher staff has increased and – based on the increasing ethnic diversity of university students – can be expected to increase in many countries like, for example the US (Villegas et al. 2012) or the Netherlands (Thijs et al. 2012) or Germany (Autorengruppe Bildungsberichterstattung 2016). Given this trend, we investigated whether ethnic minority and ethnic majority preservice teachers would be found to differ in their attitudes toward ethnic minority students.

2 Theoretical Background

2.1 Implicit and Explicit Attitudes

Attitudes are defined as the positive or negative evaluation of an object and can be divided into implicit and explicit ones (Greenwald and Banaji 1995; Gawronski and Bodenhausen 2006). The two kinds of attitudes underlie different mental processes (Gawronski et al. 2009). Implicit attitudes are automatic evaluations of an object and underlie unconscious mental processes (Gawronski and Bodenhausen 2006). They can be activated by the mere presence of the attitude object (Fazio 2001). Explicit attitudes, on the other hand, are conscious evaluations of attitude objects relying on cognitively effortful and controlled mental processes (Gawronski and Bodenhausen 2006). Correlations of implicit and explicit attitudes have yielded different results from no correlation to high positive correlations

(Hofmann et al. 2005). In this regard, it has been shown that the implicit-explicit correlation is dependent on—amongst others—social desirability effects in that the correlation between implicit and explicit attitudes decreases when both attitudes are directed to socially sensitive topics like racial attitudes (Hofmann et al. 2005). Racism or negative attitudes toward ethnic minorities are regarded as unsocial and socially not acceptable, hence it is a socially sensitive topic. People, therefore, tend to answer in accordance with society's opinion to prevent themselves from negative evaluations of others (Johnson and van de Vijver 2003). Dual process models of attitude-behavior relations (e.g., Deutsch, Gawronski, and Hofmann, 2013; Fazio, 1990; Strack and Deutsch, 2004) postulate, how these two kinds of attitudes influence behavior. Dual process models such as the *M*otivation and *O*pportunity as *DE*terminants (MODE) model propose that attitudes guide behavior (Fazio 1990; Olson and Fazio 2009b). implicit attitudes are immediate automatic responses that do not involve reflection due to a lack of motivation, opportunity, and cognitive capacity (Fazio 1990; Olson and Fazio 2009b). Therefore, implicit attitudes guide judgments and behavior in an automatic way (Fazio 1990; Olson and Fazio 2009b) and come into play most often in situations with many requirements and time constraints. In contrast to implicit attitudes, explicit attitudes are suggested to influence behavior and judgments in controlled processes, that is, in situations in which people have motivation, opportunity, and cognitive capacity (Fazio 1990; Olson and Fazio 2009b). If these conditions are present, people can reflect on their attitudes, and this can result in conscious and controlled judgments and behavior. However, it has been suggested that in most situations, implicit and explicit attitudes both influence behavior, as implicit attitudes are activated automatically and by the mere presence of an attitude object (Fazio 2001). Hence, the processes are often mixed (Olson and Fazio 2009b; Baumeister and Bargh 2014).

2.2 Measuring Implicit and Explicit Attitudes

The distinction between implicit and explicit attitudes is not only theoretical but also methodological. Implicit methods use assessments, which mostly rely on response latencies (Wittenbrink and Schwarz 2007). One such method is the Implicit Association Test (IAT; Greenwald, McGhee, and Schwartz, 1998), which measures participants' cognitive associations between two concepts (e.g., between "ethnic majority students" and "positive"). The IAT is based on the associative network assumption (Collins and Loftus 1975), which suggests that links are formed between concepts that people view as belonging together. The more often these concepts are used together, the stronger the cognitive link between the concepts becomes (Higgins 1996). In the case of strong cognitive links, the activation of one concept involves the automatic activation of the other cognitively linked concept via spreading activation (Collins and Loftus 1975; Strack and Deutsch 2004). Hence, people can easily identify these strongly linked concepts as belonging together, which is reflected in faster response latencies in comparison with concepts that do not share such strong links (Higgins 1996).

Explicit attitudes, on the other hand, are generally assessed using either a Likert scale or a semantic differential (Yang and Montgomery 2013). Therefore, participants have to deliberately reflect on their attitudes and report them, and this requires motivation and self-reflection (Fazio and Towles-Schwen 1999). Furthermore, people's responses are often susceptible to the influence of social desirability in such settings, and this is why their answers often reflect society's view rather than personal opinions (De Houwer 2006). One clear benefit of explicit attitudes, however, is that they are comparatively easy to assess, and participants are easy to acquire.

Most research has employed explicit measures. Preservice and inservice teachers' explicit attitudes toward ethnic minority students have usually been found to be positive (van

den Bergh et al. 2010; Hachfeld et al. 2012; Yang and Montgomery 2013; Kumar et al. 2015; Glock and Klapproth 2017). However, teachers' negative explicit beliefs about ethnic minority students negatively affected their instructional practices in class (Kumar et al. 2015). Previous studies on preservice and inservice teachers' implicit attitudes have usually found more negative implicit attitudes toward ethnic minority students compared with ethnic majority students (van den Bergh et al. 2010; Glock and Karbach 2015; Kumar et al. 2015; Peterson et al. 2016; Glock and Klapproth 2017). Beyond this, teachers' implicit attitudes toward ethnic minority students were related with students' achievements in that ethnic minority students in classes in which the teachers had negative implicit attitudes toward ethnic minority students performed significantly worse than ethnic minority students in classes in which the teachers had positive implicit attitudes (van den Bergh et al. 2010). Similarly, students from a specific ethnic group had an academic advantage if teachers implicitly favored this ethnic group (Peterson et al. 2016). In addition, teachers' implicit attitudes toward ethnic minority students negatively influenced teachers' classroom behavior (Kumar et al. 2015). Teachers' nonverbal communication was found to play an especially crucial role in classroom interactions (Babad 2007) and was shown to be influenced by teachers' implicit attitudes and stereotypes (Rosenthal 2003). Hence, implicit and explicit attitudes both play roles in school life and should consequently both be considered (Kumar et al. 2015).

2.3 Teachers' Ethnicity

So far, most research on teachers' attitudes has concentrated on ethnic majority teachers' attitudes toward ethnic minority students. However, some studies that took teachers' ethnicity into account have shown that students who were taught by a teacher of the same ethnicity showed higher achievement than those who were taught by a teacher whose ethnicity differed from their own (Dee 2004; Egalite et al. 2015). In contrast, ethnic minority

students who were taught by ethnic minority pedagogical staff in kindergarten did not show better achievement (Neugebauer and Klein 2016). This diverging finding might be due to the fact, that Neugebauer and Klein (2016) did not differentiate between different ethnic backgrounds and instead compared only "ethnic minority" students and teachers with "ethnic majority" students and teachers. A potential match between teachers' and students' ethnic background is especially important, as teachers perceived their relationship to their students more positively when the students had the same ethnicity as themselves than when students had another ethnicity (Saft and Pianta 2001; Thijs et al. 2012). Furthermore, teachers evaluated ethnic minority students as more attentive and less disruptive when they shared the same ethnic background (Dee 2005), and teachers attributed fewer problem behaviors to ethnic minority students who shared their background (Bates and Glick 2013). Ethnic minority teachers were also found to show more positive explicit attitudes toward ethnic minority students than shown by ethnic majority teachers. These explicit attitudes were operationalized by measures of teachers' multicultural beliefs (Hachfeld et al. 2012), expectations of students, willingness to teach, and teaching efficacy (Bakari 2003).

In line with the findings outlined above, students might benefit from being taught by a teacher who shares the same ethnic background. Such matches between the ethnicities of students and teachers might be advantageous because people belonging to the same group (i.e., in-group members) tend to evaluate each other more positively than they tend to evaluate people from another group (i.e., out-group members; Tajfel, 1974; Tajfel and Turner, 1986). According to social identity theory, people define their social identity through group memberships and aim to achieve a positive social identity. In this regard, group members compare their in-group to out-groups and positively define the in-group to maintain their status (Tajfel 1974; Tajfel and Turner 1986). This preference for the in-group is called in-group favoritism (Turner et al. 1979; Brown 2000; Dasgupta 2004), which does not

necessarily mean that out-groups are derogated but is rather reflected in more positive attitudes, beliefs, and behavior toward the in-group compared with more neutral attitudes toward the out-group (Turner et al. 1979; Brown 2000; Glock and Karbach 2015).

However, in a situation in which people do not have an in-group to identify themselves with and are hence given only out-groups to compare (e.g., if a Vietnamese student judges Turkish and German students), people can be expected to show neutral attitudes toward the present out-groups because no comparison to one's own in-group can be made. Yet, in-group favoritism generally has a different impact on implicit compared with explicit attitudes. Explicit attitudes do not usually reveal differences between the in-group and out-group in that neither group is preferred or derogated, which might be traced back to social desirability effects. In contrast, in-group favoritism is mostly found on an implicit level (Rudman et al. 2002). Such dynamics, which go back to group belonging, might hold as one explanation for the above findings on teacher-student relationships.

However, not all groups show positively distinct attitudes toward their in-group as compared to out-groups (Jost and Banaji 1994; Rudman et al. 2002; Dasgupta 2004; Jost et al. 2004). Low-status groups often take on high-status out-groups' stereotypes and negative attitudes toward the low-status group. When low-status groups have experienced high levels of disadvantages and prejudicial beliefs from advantaged out-groups, the low-status groups have sometimes shown less implicit in-group favoritism (Livingston 2002; Jost et al. 2004). By contrast, low-status groups that experienced high levels of negativity from out-groups have been found to express explicit attitudes that revealed more in-group favoritism (Livingston 2002; Nosek et al. 2002; Jost et al. 2004).

System justification theory explains the tendency to implicitly favor the out-group on the basis of the status quos of the groups (Jost and Banaji 1994; Jost et al. 2004). People tend to internalize social hierarchies even to the detriment of how they feel about their in-group

and consequently show more negative implicit attitudes toward their in-group when they belong to a low-status group than when they are a high-status group member (Jost and Banaji 1994; Rudman et al. 2002; Jost et al. 2004). This tendency is found on an implicit level rather than on an explicit one, as the reasons for peoples' social hierarchies tendencies are also implicit (Jost and Banaji 1994). In the US, the discrepancy regarding social hierarchies has been shown, for example, for Blacks' versus Whites' attitudes toward their respective in-groups (Livingston 2002; Nosek et al. 2002). Blacks are referred to as a low-status group, which is—amongst others—revealed by the disadvantages they experience in the labor market and the educational system (O'Brien and Major 2005). Such disadvantages also hold for Turkish students in Germany (Heath et al. 2008) whose parents are often employed in unskilled jobs (Kogan 2011) and have low educational qualifications (Crul and Vermeulen 2003; Kristen and Granato 2007). Hence, it could also be plausible to expect that Turkish preservice and inservice teachers in Germany would have negative implicit attitudes toward their in-group due to their low status. However, to our knowledge, there are no studies that have assessed Turkish teachers' attitudes toward their in-group.

Corresponding to the theoretical background, we expected implicit attitudes to differ in accordance with preservice teachers' ethnic backgrounds. More specifically, we expected ethnic majority preservice teachers to have negative implicit attitudes toward Turkish students. Regarding Turkish preservice teachers' implicit attitudes, we expected either positive implicit attitudes or negative implicit attitudes toward Turkish students depending on the more pronounced underlying mechanism. If in-group favoritism is the leading mechanism, implicit attitudes should be positive. If, however, system justification theory and therefore out-group favoritism is the more pronounced mechanism, we expected negative implicit attitudes toward Turkish students. In addition, we investigated a third group of preservice teachers whose ethnic backgrounds were not Turkish or German and who

therefore did not belong to either assessed group. Therefore, we expected them not to identify with any group, and as a result, to show no preference for German students or for Turkish students on an implicit level. On an explicit level, we expected all of the three groups to report positive attitudes toward Turkish students due to social desirability effects.

3 Method

3.1 Participants and Design

One hundred forty-nine preservice teachers from two German universities participated in this study. One hundred six participants were female, 42 were male and one participant did not provide this information. The preservice teachers were on average 23.99 (*SD* = 2.69) years old and had an average teaching experience of 33.55 weeks (*SD* = 52.80). The ethnic minority participants were divided into those who originally came from Turkey (*n* = 47) and those who came from other countries (*n* = 38). These preservice teachers came from Poland, Russia, the Balkan States, and Arabian or African countries, among others. The study employed a between-subjects design with preservice teachers' ethnic background (German vs. Turkish vs. other) as the factor.

3.2 Measures

3.2.1 Implicit attitudes. Implicit attitudes were assessed with the Implicit Association Test (IAT; Greenwald, McGhee, and Schwartz, 1998). To implement the pleasant and unpleasant categories, we used 20 positive (e.g., happy) and 20 negative adjectives (e.g., angry) derived from previous research (Glock, Kneer, and Kovacs, 2013). For the target category "German," we used six German male (Philipp, Finn, Niklas, Jonas, Tim, Paul) and six German female names (Leonie, Charlotte, Julia, Emma, Marie, Sophie). We used the same numbers of male (Cem, Erkan, Enis, Mert, Gökhan, Salim) and female names (Elif, Yasemin, Filiz, Zeynep, Tugba, Hanife) to indicate the category "Turkish." The correlation between the IAT score calculated from the practice and the test trials as a proxy for internal consistency was .65. Participants' response latencies functioned as the dependent variable.

3.2.2 Explicit attitudes. To measure explicit attitudes, we used the prejudiced beliefs scale developed by Hachfeld, Schroeder, Anders, Hahn, and Kunter (2012) and replaced the words "students with an immigrant background" with "Turkish students." Across the five items, stereotypical beliefs referred to lower school interest, attention, effort, knowledge, and thirst for knowledge (Cronbach's $\alpha = .90$)

3.2.3 Demographic questionnaire. We compiled a demographic questionnaire that assessed participants' age, gender, and teaching experience in weeks. We also asked them to indicate whether they had an ethnic minority background. If they answered affirmatively, we asked them to report the country they came from.

3.3 Procedure

Participants were recruited in their university courses and asked whether they would like to participate in a study. The study was compiled in two different versions: a female and a male version, and participants were randomly assigned to the different versions. First, the IAT was run on the computer. In this first phase of the IAT, participants were asked to sort Turkish and German names by using the "I" and "E" keys on the keyboard. In the second phase, participants categorized the positive and negative adjectives into the categories "pleasant" and "unpleasant." In the third phase, the two tasks were combined, and this combination was counterbalanced between participants. One half of the participants used the "E" key to sort negative adjectives and Turkish names together and the "I" key to categorize positive adjectives and German names together. The other half of the participants sorted positive adjectives and Turkish names using one computer key and negative adjectives and German names using the other computer key. In the fourth phase, the positions of the "pleasant" and "unpleasant" categories were switched, and subsequently, in the fifth phase, participants received the reversed order of combinations in comparison with Phase 3. Afterwards, participants indicated their agreement with the prejudiced beliefs scale on a 5-

point Likert scale ranging from 1 (*do not agree at all*) to 5 (*totally agree*). After participants filled out the demographic questionnaire, they were thanked and debriefed.

4 Results

4.1 Implicit Attitudes

Participants' response latencies were screened for responses under 400 ms and above 10,000 ms, both of which were excluded from further analyses (1.14%; Greenwald, Nosek, and Banaji, 2003). Then the response latencies of participants' error trials (they erroneously classified a Turkish name as German or vice versa or they erroneously categorized a positive adjective as negative or vice versa) were replaced by the block mean + 600 ms. Corresponding to Greenwald, Nosek, and Banaji's (2003) suggestions, the response latencies of both the practice and test trials were included in the analyses. For the *D* measure the difference between the compatible and incompatible trials was calculated and divided by the standard deviations of both trials. The D-measure was computed in a way that positive scores reflected negative implicit attitudes. We submitted the *D* measure to a one-factorial between-subjects ANOVA with ethnic background as the factor (German vs. Turkish vs. other). The ANOVA revealed a significant main effect, $F(2, 145) = 19.66$, $p < .05$, $\eta_p^2 = 0.21$ (see Figure 1). The German participants ($M = 0.57$, $SD = 0.71$) showed more negative implicit attitudes toward Turkish students than the Turkish participants ($M = -0.41$, $SD = 0.93$), $t(108) = 6.22$, $p < .05$, $d = 1.18$, or the other participants did ($M = 0.26$, $SD = 0.81$), $t(99) = 1.95$, $p = .05$, $d = 0.41$. The Turkish preservice teachers showed more positive implicit attitudes than the group of other participants did, $t(83) = 3.51$, $p < .05$, $d = 0.77$.

Insert Figure 1 about here.

Note. Positive values indicate more negative attitudes towards Turkish students compared to German students.

4.2 Explicit Attitudes

The mean of the five items was submitted to a one-factorial between-subjects ANOVA with ethnic background as the factor (German vs. Turkish vs. other). This ANOVA yielded no significant main effect, indicating that the different groups did not differ in their prejudiced beliefs, $F(2, 144) = 19.66$, $p = .34$, $\eta_p^2 = 0.02$ (see Figure 2). That is, the German preservice teachers' prejudiced beliefs regarding Turkish students ($M = 2.04$, $SD = 0.93$) were as low as those of the Turkish participants ($M = 1.91$, $SD = 0.73$) and the other participants ($M = 1.79$, $SD = 0.79$).

Insert Figure 2 about here.

Note. Positive values indicate positive attitudes towards Turkish students.

5 Discussion

The results were in line with our hypotheses. Turkish preservice teachers' implicit attitudes were more in favor of Turkish students than German preservice teachers' atittudes or the attitudes of preservice teachers' from other countries were, indicating the in-group favoritism of Turkish preservice teachers. German preservice teachers' attitudes showed more negative attitudes toward Turkish students than did preservice teachers form other countries. Turkish preservice teachers held more positive implicit attitudes toward their in-group. The potentially underlying mechanism - a more pronounced in-group favoritism of Turkish preservice teachers instead of out-group favoritism - might be traced back to their particular ethnicity. Many Turkish people are Muslims who are usually found to be rather collectivist (Phalet and Schönpflug 2001). Their collectivist orientation indicates that they have a strong focus on their group (Phalet and Schönpflug 2001; Thijs 2011). This orientation might explain why they did not internalize the prejudices and stereotypes of the high-status group. Moreover, preservice teachers' implicit attitudes with other ethnic backgrounds in the current study were rather neutral. In this particular case, this finding might be traced back to the fact that these preservice teachers did not have an in-group with which to compare in this

study. On an explicit level, these differences in attitudes could not be found between teachers of different ethnic backgrounds.

These results have several implications for teacher-student interactions in school. Teachers' judgments and behaviors are strongly impacted by their implicit attitudes (van den Bergh et al. 2010). Considering that Turkish preservice teachers had more positive implicit attitudes toward their respective in-groups than German preservice teachers, an ethnic match between a teacher and student might be advantageous for the students. Furthermore, as implicit attitudes can influence teachers' classroom behavior (Kumar et al. 2015), teachers' interactions with their students who share the same ethnic background might be less constrained and ambiguous than with students from other ethnic backgrounds, and such positive interactions might foster students' achievements. People from the same ethnicity share not only a language but also cultural knowledge, symbols, and values (Lareau 1987, 2002; McGrady and Reynolds 2013). This makes it easier for them to communicate with each other—verbally and nonverbally. Regarding teacher-student interactions, nonverbal communication in particular has been shown to play a crucial role (Babad 2007). In addition, an ethnic match might prove valuable for teachers' interactions with students' parents. Beyond this, parents might feel better understood and might therefore open up more easily to a teacher who shares their ethnic background, which, in turn, might lead the teacher to develop a positive image of the parents (Lareau and Weininger 2003; McGrady and Reynolds 2013).

By contrast, no such effects were found for explicit attitudes. As expected, preservice teachers' explicit attitudes did not differ as a function of their ethnic background, and this finding is in line with previous research (Rudman et al. 2002). However, implicit attitudes almost always play a role due to their automatic activation (Olson and Fazio 2009a), and social desirability is always a critical part of questionnaire methods (van de Mortel 2008).

The increase in the attention paid to the disadvantages of ethnic minority students in German schools driven by researchers and the media after the results of international large scale assessments were released (Stanat et al. 2010; Gebhardt et al. 2013) might have additionally raised teachers' awareness of this matter. Furthermore, Turkish preservice teachers have likely experienced the inequalities themselves or learned about the inequalities Turkish students experience in school, at universities, or from the media. This awareness can lead to a strong aspiration to diminish these inequalities (Su 1996) and make them especially motivated to show positive attitudes and behavior toward Turkish students.

5.1 Limitations and Future Directions

When interpreting our results, some limitations should be considered. Preservice teachers whose ethnic backgrounds were not Turkish or German had no in-group to conduct comparisons with. Their implicit attitudes were based on only their evaluation of Turkish students compared with German students and might likely have been different if their relative in-groups had been part of the IAT. Nonetheless, our results imply that preservice teachers from other ethnicities might treat German and Turkish students more equally, but it might be plausible to assume that these preservice teachers might also favor their respective in-group students.

In order to investigate such a hypothesis, future research should focus on more than two student ethnicities. The investigation of other student ethnicities is not only of interest for the cultural match between teachers and students but also because there are ethnic minority student groups that differ from Turkish students. For instance, Asian students are often perceived positively (Rosenbloom and Way, 2004), and their achievement tends to be as high as that of ethnic majority students (Walter 2011). Thus, this might account for why teachers do not perceive Asian students more negatively than they perceive their in-group. Hence, teachers' attitudes might differ toward students from different ethnicities.

Moreover, the IAT has to be interpreted carefully as it is a relative measure (Schnabel et al. 2007). It can be applied to determine that one group is preferred over another, therefore one group can only be investigated in comparison to another group. In order to disentangle the relations inherent in our data, other methods such as affective priming (Fazio et al. 1986; Fazio 1995) might be useful because they would allow researchers to differentiate between attitudes toward Turkish versus German students.

We assessed explicit attitudes only toward Turkish students and therefore did not have the relative measure as with the IAT. The assessment of explicit attitudes therefore lacked a contrasting group in that participants were not asked about their explicit attitudes toward German students. In other research, semantic differentials have often been employed to assess explicit attitudes and to collect explicit attitudes toward both ethnic minority and ethnic majority groups (Morland and Williams 1969; Greenwald et al. 1998; Dasgupta and Greenwald 2001). Future research might employ explicit attitude measures that focus on the two ethnic groups within one semantic differential, for example, ranging from Turkish to German.

Notwithstanding these limitations, this is the first study to examine preservice teachers' attitudes toward ethnic minority students as a function of preservice teachers' own ethnic background. Even though Turkish teachers' attitudes toward Turkish students were implicitly positive, a glance at German schools shows that whereas 25% of the students have an ethnic minority background (Stanat et al. 2010), only 4.7% of the teachers have ethnic minority backgrounds (Statistisches Bundesamt 2010). Nonetheless, the high number of Turkish and other ethnic minority preservice teachers who participated in this study might serve as a first indicator that the future will bring a greater variety of ethnicities among teachers, and this might be beneficial for ethnic minority students who also hail from a great variety of ethnicities (Bundesamt für Migration und Flüchtlinge 2010).

5.2 Conclusion

In conclusion, we found support for the assumption that teachers' implicit attitudes toward Turkish students differ according to their own ethnic background, whereas this was not found for their explicit attitudes toward Turkish students. However, hiring Turkish teachers might help alleviate some of the disadvantages that Turkish students suffer from. Even though there is a wide variety of different ethnicities among students, it is Turkish students who show particularly low performances and might therefore be especially disadvantaged (Stanat et al. 2010). In-group favoritism implies that some students are preferred, whereas others are disadvantaged on the basis of a mismatch between a teacher's and a student's ethnicities and that this may change from subject to subject because students usually have various teachers for different subjects.

Hence, schools should focus on not only selecting a range of different ethnicities across the teaching staff but also on how to decrease in-group favoritism that is based on ethnicity. A focus on integrating ethnic minority students into the society of the ethnic majority might be one possibility. Integration typically includes assimilation, but this is a task that needs to be embraced by the ethnic majority students as well as the ethnic minority students. This means that, in this context, the out-group converges with the in-group, for example, regarding language or cultural patterns (Alba and Nee 1997; Kalter and Granato 2002). Such an assimilation process might lead ethnic majority members to perceive ethnic minority members as belonging to their in-group, and vice versa, and might therefore result in favoritism. Yet, integration is a long-term process, but Turkish teachers and preservice teachers, who are increasing in numbers as suggested by the current sample, could set a good example for successful integration. Future research could potentially focus on teachers' attitudes toward integrated versus nonintegrated ethnic minority students.

Conflict of interest: The authors declare that they have no conflict of interest.

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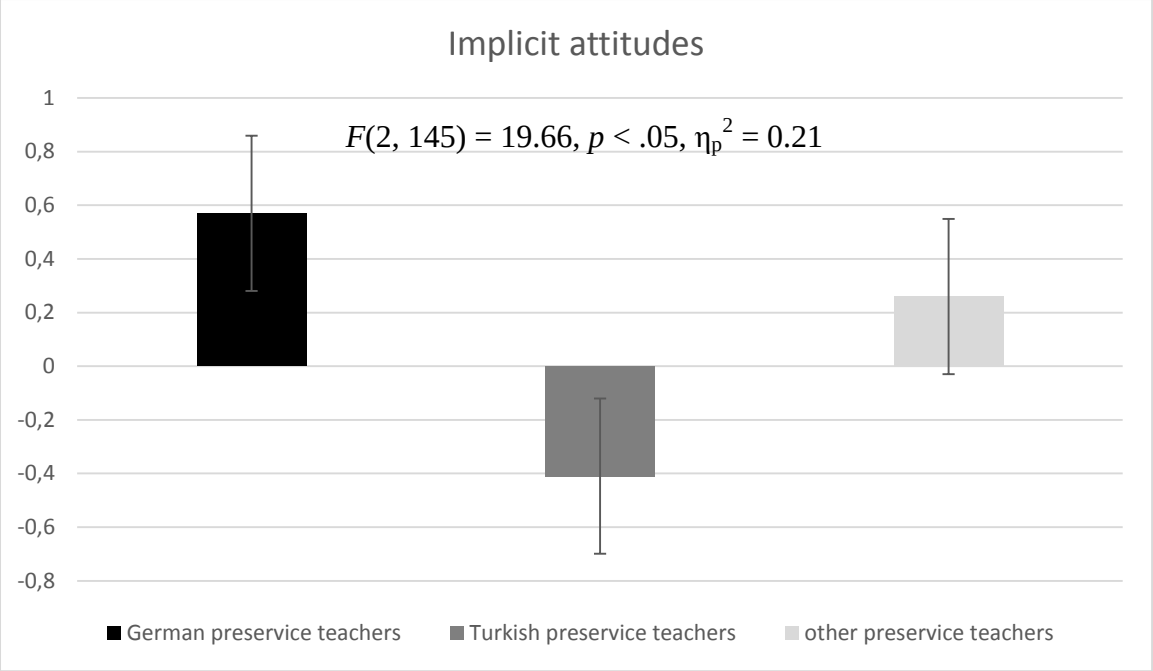

Figure 1. Implicit attitudes separated by preservice teachers' ethnic background.

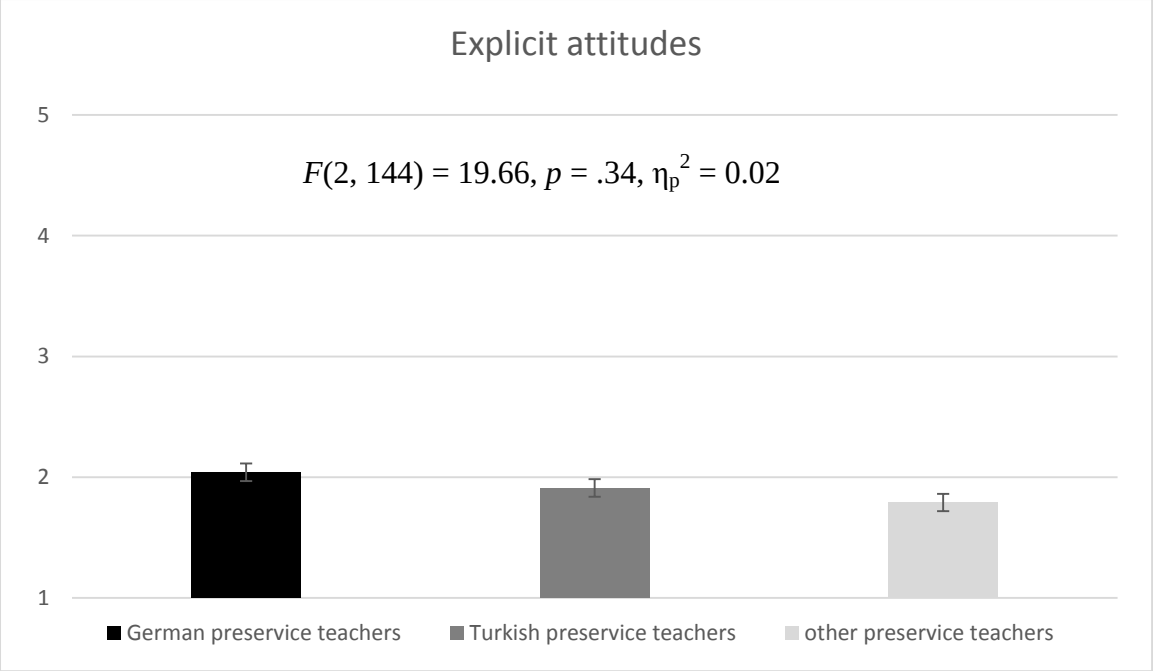

Figure 2. Explicit attitudes separated by preservice teachers' ethnic background