

Association of self-efficacy and achievement goals in university lecturers teaching

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According to the hierarchical model of approach and avoidance achievement motivation, self-efficacy is a predictor of achievement goals. We investigated whether the associations can be found in university lecturers' professional goal pursuit as well. We try to fill a research gap in the effects of self-efficacy on situation-specific achievement goals. Considering construal-level theory, differences in level of construal should go along with differences in the strength of associations. In general, the predictive utility of dependent variables is maximized, if dependent and independent variables are operationalized at the same level. Therefore, we propose situation-specific self-efficacy as better predictor for situation-specific achievement goals than more global self-efficacy measures, because the assessment of situation-specific self-efficacy considers the task-specificity. We investigated this hypothesis for lecturers' in a micro-longitudinal study in the teaching domain. Therefore, we questioned a sample of 85 German university lecturers in the first five weeks of a semester before teaching their class about their specific goals in this class as well as their self-efficacy in this situation resulting in 390 measurement occasions. In a baseline questionnaire one week before the start of the semester, we asked them about their context-specific self-efficacy on a trait level (self-efficacy in teaching). Applying a multilevel structural equation model, we found positive effects of situation-specific self-efficacy on situation-specific achievement approach goals between participants even controlled for their context-specific self-efficacy, but no within effects of situation-specific self-efficacy. These findings demonstrate the impact of situation-specific self-efficacy on situation-specific achievement goals and close the mentioned gap.

Recently, empirical research started investigating university lecturers' achievement goals. This research has shown that distinct classes of goals are suitable to describe achievement motivation in university lecturers and that these achievement goals were predictive for important outcomes such as work engagement (Janke & Dickhäuser, 2018) and teaching quality (Daumiller, Dickhäuser & Dresel, 2018). To date, there is still little knowledge on the antecedents of university instructors' achievement goals. According to the hierarchical model of achievement motivation (Elliot & Church, 1997), self-efficacy (the belief in ones' capabilities to carry out specific tasks) is a predictor of achievement goals. Trait and state aspects of achievement goals can be distinguished in lecturers (Janke & Dickhäuser, 2018). This study aims to clarify context- and situation-specific self-efficacy as predictors of situation-specific achievement goals in lecturers. Independent variables predictive utility is maximized, if independent and dependent variables are operationalized at the same level (Aizen & Fishbein, 1997). Therefore, from an empirical point, situation-specific self-efficacy should be more predictive for situation-specific achievement goals than context-specific self-efficacy. Stronger associations on a situation-specific level can be expected theoretically based on construal-level theory (Trope, & Liberman, 2010). For self-efficacy and achievement goals on the same level, the levels of mental construal are more alike. Context-specific self-efficacy is further removed from direct experience and has a higher level of construal than situation-specific self-efficacy. This difference in level of construal should go along with differences in the strength of associations. Consequently, situation-specific self-efficacy should be even stronger predictive for situation-specific goals than context-specific self-efficacy is. Consistent with previous studies and the hierarchical model, we expected positive associations of self-efficacy and mastery goals (learning and task approach goals; Payne et al., 2007) and negative associations of self-efficacy and performance avoidance goals (normative avoidance goals, appearance avoidance goals;

Payne et al., 2007). Previous research found mixed associations between performance approach goals and self-efficacy. We expected self-efficacy to be positively associated with performance approach goals (norm and appearance approach goals) in our sample of high-ability individuals.

In a micro-longitudinal study, we questioned a sample of 85 German university lecturers (53% female, 40.5 years on average). The participants answered a baseline questionnaire before the semester started and weekly immediately before teaching their courses for the first five sessions of the semester (in total 390 weekly measurement occasions, on average 3.45 (SD = 0.68) weekly measurements per participant). We assessed their context-specific self-efficacy in the baseline questionnaire with an adapted version of the teacher efficacy scale (Nie, Lau, & Liao, 2012). University lecturers were asked how well they succeed in teaching (instructing and motivating students as well as classroom management) in general. In the short weekly questionnaire, participants had to report their achievement goals and self-efficacy for the respective course session at the same time. Lecturers rated the strength of their goals and of their belief in doing well in the respective day's class on adapted versions of validated self-report scales. We estimated a multilevel structural equation model with manifest factors including context- and situation-specific self-efficacy as predictors of achievement goals between participants and situation-specific self-efficacy as predictor within individuals.

Context- and situation-specific self-efficacy correlated significantly between participants ($r = .54$, $p < .001$). We found that the general level of situation-specific self-efficacy was predictive for the general level of situation-specific mastery goals (between; learning approach goals: $\beta = 0.45$, $p < .001$; task approach goals: $\beta = 0.91$, $p < .001$). Context-specific self-efficacy was not significantly associated with learning approach goals ($p = .114$), but significantly associated with task approach goals (between: $\beta = -0.26$, $p = .004$). Situation-specific self-efficacy was stronger predictive for task approach goals than context specific self-efficacy ($p < .001$). Levels of context- and situation-specific self-efficacy explained 16% in the variance of learning approach goals ($p = .040$) and 64% of variance of task approach goals ($p < .001$). Context- and situation-specific self-efficacy did not significantly explain variance in the other situation-specific achievement goals (between; $p = .070 - .158$). Fluctuations in situation-specific self-efficacy were not significantly associated with situation-specific fluctuations in achievement goals (within; $p = .160 - .989$).

As hypothesized and in line with previous findings, the general level of situation-specific self-efficacy was positively associated with the general level of mastery goals (learning approach and task approach). A high self-efficacy might enable university lecturers to build up mastery goals that showed to be beneficial for emotions, cognitions and behavior in different achievement situations (e.g., for professional learning). Against our expectations and in contrast to previous research, the links to performance goals were not significant. This could be due to a lack of power. The fact that we did not find the expected effects on a within level could be due to the short time period. Self-efficacy is rather stable over time and might not vary that much within five weeks. In future research longitudinal designs could use a longer period between the situation-specific measurement occasions to investigate within effects of self-efficacy on achievement goals and to clarify the direction of effects.

Literature

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