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General versus specific achievement goals: A re-examination

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ABSTRACT

Previous studies revealed inconsistent results regarding the relative importance of specific and general achievement goals (mastery goals, performance-approach goals, performance-avoidance goals, work-avoidance goals) in predicting specific and general scholastic outcomes (interests, importance, grades). Therefore, high-school students ($N = 1210$; grades 7–10) answered a questionnaire assessing these variables on a general academic and school-subject-specific (six school subjects) level. The findings showed (mostly) stronger relationships when achievement goals and scholastic outcomes matched the specificity level than when the variables were mismatched. Regarding achievement goals, mastery goals were the best predictors. The results evidenced the relevance of matching the specificity level of achievement goals and scholastic outcomes.

1. Introduction

For the past three decades, achievement goals have been one of the most prominent achievement motivation constructs. Conceptually, achievement goals are related to the intention or motivational purpose to engage in particular tasks. Empirically, achievement goals proved to be important predictors of education- and school-related variables, behavior, and outcomes (cf. Elliot, 1999, 2005). One unresolved question concerns the level of specificity to conceptualize and measure achievement goals (e.g., assessed on a global level, related to school in general, or according to specific school subjects). In order to clarify heterogeneous findings regarding the association with related variables (e.g., academic achievement, interests, see Hulleman, Schrager, Bodmann, & Harackiewicz, 2010) the matching of the specificity levels of achievement goals and outcome variables might be important and has not been addressed systematically nor in detail.

Since the advent of research on achievement goals, *mastery* and *performance goals* were differentiated (cf. Elliot, 2005; 2-factor-model), thereby referring to the definition of competence by different comparison standards (cf. Elliot & Murayama, 2008). By focusing on intrapersonal or absolute comparison standards, mastery goals refer mainly to an increase in abilities and competencies as motivational purposes to engage in a task. In contrast, performance goals focus on social comparisons with performances from others and the evaluation of (in)competencies relative to others. By considering the fundamental distinction between approach and avoidance for performance goals, the trichotomous goal framework (3-factor-model) was introduced (Elliot, 1999). Here, performance goals were divided into *performance-approach goals* focusing on the attainment of normative competence as a motivational purpose and *performance-avoidance goals* focusing on the avoidance of incompetence relative to the performance from others. By additionally differentiating *mastery-approach goals* (the focus is on the attainment of intrapersonal or absolute competence) from *mastery-avoidance goals* (the focus is on the avoidance of intrapersonal or task-referential incompetence), the 2 × 2- or 4-factor model resulted (cf. Elliot & Murayama, 2008). However, there is still less empirical support for mastery-avoidance goals compared to the other three achievement goals (Moller & Elliot, 2006; Wirthwein, Sparfeldt, Pinquart, Wegerer, & Steinmayr, 2013). Hence, this study focuses on the most frequently investigated trichotomous achievement goal framework (Huang, 2012; Wirthwein et al., 2013). Notwithstanding the relevance of these aforementioned crucial achievement goals, further achievement goals have been introduced (e.g., Elliot & McGregor, 2001; Elliot, Murayama, & Pekrun, 2011). Some researchers included *work-avoidance goals* (i.e., striving to reduce the work allocated in academic situations) as another important achievement goal (cf. Nicholls, 1984). Although there is a debate about whether work-avoidance goals can be subsumed under the construct of achievement

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goals (cf. Wolters, 2003), we decided to additionally investigate work-avoidance goals because of substantial negative associations with important educational outcomes (e.g., Wirthwein et al., 2013).

Regarding the relations of the mentioned achievement goals with important variables (e.g., meta-analyses by Huang, 2012; Hulleman et al., 2010; Wirthwein et al., 2013), mastery goals and performance-approach goals were for the most part positively correlated with positive achievement-related outcome variables (e.g., with academic achievement: $r_{mean} = .13$ and .08, respectively; Wirthwein et al., 2013); performance-avoidance ($r_{mean} = -.12$) and work-avoidance goals ($r_{mean} = -.11$) correlated negatively with these variables, although the mean association was rather small.

The achievement goal assessment can be realized on a rather specific (e.g., different school subjects) or general level (e.g., school in general). Correspondingly, measurement specificity may help to further clarify the relation of achievement goals to outcome variables (Elliot, 2005). To date, little research has been conducted to investigate systematically the importance of the level of specificity in predicting scholastic outcomes with regard to achievement goals. The few previous results revealed an inconsistent pattern (cf. Baranik, Barron, & Finney, 2010). Theoretically, criterion-related validity coefficients are maximized by matching predictor and criterion variables by the level of specificity, so called *matching level of specificity* (e.g., Bong, 2001; Green, Martin, & Marsh, 2007; Tett, Steele, & Beauregard, 2003; Wittmann, 1988).

Regarding psychological mechanisms when answering achievement goal items like "My goal is to learn as much as possible" (Elliot & Murayama, 2008, p. 617), respondents are supposed to either retrieve an existing judgment from their memory or form a judgment based on relevant information (cf. Schwarz, 2007, p. 278). If the item is related to a specific school subject, for example mathematics *or* English, respondents might think about different aspects of the corresponding subjects or situations in their mathematics *or* English class (e.g., learning as much as possible about algebra *or* about Shakespeare's dramas). Depending on whether respondents' judgments related to mathematics and English differ, their corresponding school-subject-specific answer may also differ. If, however, respondents answer the item related to school in general, they are probably forming an overall judgment that might be a mixture across judgments related to different school subjects. If the suggested mechanism is an adequate description for many respondents and if the judgment differs between school subjects for a substantial number of respondents, the correlational pattern resulting from this mechanism should correspond with the predictions of the "matching level of specificity". Regarding self-beliefs and academic achievement, Valentine, DuBois, and Cooper (2004) found support for the assumption that matching both variables (e.g., mathematical self-concept and mathematical achievement) leads to higher effect sizes compared to variables with a "mismatch" (e.g., mathematical self-concept and achievement in English). However, specific self-concepts are not always related closer to specific beliefs, behaviors, and achievements; sometimes more general self-concepts are related even closer to specific outcomes (e.g., for individuals with low need for cognition or for situations with high cognitive load; Dickhäuser & Reinhard, 2006; cf. Reinhard & Dickhäuser, 2011).

Concerning achievement goals, Huang (2012) analyzed (among others) the moderators "specificity of achievement goals" (i.e., whether achievement goals were assessed for school in general or a specific school subject) and "domain matching between achievement goals and achievement" (i.e., whether both variables were assessed within [match] vs. not within [nonmatch] the same domain). Regarding the specificity of achievement goals, he found higher correlations among achievement and performance-goals (moderator analysis of the 2-factor-model) and performance-avoidance goals (moderator analysis of the 3-factor model) when the achievement goals were assessed on a specific level. Regarding domain matching, the correlations were higher when achievement and mastery goals, as well as, performance-avoidance goals of the 3-factor model were assessed in matching domains. In another meta-analysis, Wirthwein et al. (2013) confirmed Huang's results especially regarding mastery goals: When mastery goals and achievement were assessed on the same level (specific or global) the correlations were higher than the correlations for different levels of specificity.

Regarding the relative amount of school-subject specificity of achievement goals, mastery goals seem to be especially focused on the specific content or context; for example, they refer to an increase in competencies in mathematics *or* English (Sparfeldt, Buch, Wirthwein, & Rost, 2007). Similarly, the substantial associations between mastery goals and other school subject-specific motivational variables such as interest (Hulleman et al., 2010) might correspond with a larger amount of school-subject specificity of this achievement goal. However, performance-approach and performance-avoidance goals with a focus on rather context-independent social evaluations are probably more context-independent than mastery goals (cf. Sparfeldt et al., 2007). Work-avoidance goals seem to be also rather context-independent, since they focus on the tendency to invest as little effort as possible, irrespective of the specific task at hand (e.g., Sparfeldt et al., 2007).

The results of Baranik et al. (2010) seem to (partially) contradict the principle of matching specificity levels in university students. Compared to general achievement goals (related to *all* courses taken), specific achievement goals (related to a *specific* course) correlated higher with only some specific (matching) outcome measures (specific academic interest, specific value of learning) and not with others (general interest in learning, general perceived value of learning, specific and general measures of performance). General achievement goals did not correlate higher with any outcome variables compared to specific achievement goals. Nevertheless, the conclusions might be questioned: Firstly, general and specific performance goal measures were highly correlated ($r = .89$ for performance-approach goals; $r = .89$ for performance-avoidance goals), and so were general and specific grades ($r = .79$). Correlations of this magnitude limit the chance for differential criterion-related validity coefficients. Secondly, the variance overlap between achievement goals and outcome variables was, at most, small to medium (adhering to Cohen, 1992). Concerning outcomes, correlations were higher for interests and importance than for grades; regarding achievement goals, correlations were higher for mastery-approach goals than for mastery-avoidance goals, performance-approach goals and performance-avoidance goals. In summary, the study of Baranik et al. (2010) has failed to fully confirm the relevance of the matching level of specificity; but this might be due mainly to methodological reasons.

As in many studies before, Baranik et al. (2010) investigated university students. But, there might be some advantages of investigating high-school students instead: High-school students usually have to take a number of school subjects that differ substantially in, for example, content, demands on learners, didactics, and testing methods. By investigating different school subjects simultaneously, it is possible to check whether the relational pattern is similar in varying content areas. Additionally, the correlations of general and specific outcomes (e.g., interest, achievement), as well as, general and specific achievement goals (especially for more content-specific mastery goals) might be lower in high-school students than in university students because of larger differences among the different school subjects than among the different courses of one college or university study program, thereby increasing chances for differential criterion-related validity coefficients. To date, there are (to our knowledge) no studies that have investigated these achievement goal–outcome-relationships in high-school students systematically.

Therefore, this study was designed to inspect the relative importance of general and specific achievement goals (mastery-, performance-approach-, performance-avoidance-, and work-avoidance goals) in predicting general and specific scholastic outcomes (interests, importance, grades) in high-school students. Based on the above,