Extending antecedents of achievement goals: The double-edged sword effect of social-oriented achievement motive and gender differences

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ABSTRACT

Underpinned by the hierarchical model of approach and avoidance motivation, the study examined the differential relations of individual-oriented and social-oriented achievement motives to approach and avoidance achievement goals (mastery-approach, performance-approach, mastery-avoidance, performance-avoidance). A total of 570 Chinese high school students participated in this study. Path analysis was conducted and gender differences were also examined. The results from both boys and girls samples converged: individual-oriented achievement motive was a positive predictor of only the two approach goals, whereas social-oriented achievement motive was a positive predictor of both approach and avoidance goals. These findings hold important applied implications for parents and teachers in enhancing their children's/students' academic motivation.

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In the past two decades, achievement goals have been a central construct in the study of student motivation because of their associations with key motivational, cognitive, and behavioral outcomes (e.g., Åge, 2011; Elliot, 2006; Gonida, Voulala, & Kiosseoglou, 2009; Kaplan & Maehr, 2007; Kim & Chung, 2012; Polychroni, Hatzichristou, & Sideridis, 2012; Steinmayr, Bipp, & Spinath, 2011). Based on a frame of reference that individuals use to gauge their competence, achievement goal pioneers (e.g., Ames, 1984; Dweck, 1986; Nicholls, 1979) proposed that performance goals focus on the demonstration of competence relative to others (other-referenced), whereas mastery goals focus on the development of competence and mastery of tasks (task-referenced). Thus, in the early achievement goal theory, task and others were the two main reference points to gauge competence. Subsequently, Elliot (1999) incorporated the 'classic' approach-avoidance differentiation of motivation and proposed a 2×2 achievement goal framework, comprising the following goals: (a) mastery-approach goals, emphasizing learning new knowledge and improving skills; (b) mastery-avoidance goals, emphasizing the avoidance of losing skills and competence; (c) performance-approach goals, emphasizing the demonstration of one's superiority over others; and (d) performance-avoidance goals, emphasizing the avoidance of looking incompetence relative to others.

The incorporation of the approach-avoidance dimensions in achievement goal constructs is fundamental to the study of student motivation, particularly in understanding their antecedents and consequences. One of the major reviews by Moller and Elliot (2006), for example, suggested that cognitive and motivational consequences of mastery-approach

goals are generally positive, those of performance-approach goals are also adaptive in many instances, whereas those of both mastery-avoidance and performance-avoidance goals are typically inimical. Accordingly, identifying antecedents of approach and avoidance achievement goals is an important research focus in student motivation, especially as far as its educational implications are concerned. Underpinned by the hierarchical model of approach and avoidance motivation (Elliot, 2006), the present study seeks to extend the literature by assessing both individual-oriented and social-oriented achievement motives as antecedents of the achievement goal adoption in Mainland Chinese students — a group of learners of growing interest in achievement motivation literature (see e.g., Hau & Ho, 2010).

1. Achievement motive

Another key construct of particular importance and relevance to student academic functioning is achievement motive. Achievement motive is regarded as a fundamental disposition that orients individuals toward the possibility of success, thus prompting the adoption of self-regulatory forms focused on the attainment of approach goals (Atkinson, 1957; Elliot & Church, 1997; McClelland, 1985; McClelland, Atkinson, Clark, & Lowell, 1953). Achievement motives, as typically defined in Western-based theories and research, are individual-oriented in nature and strongly mirror individualist values (e.g., I enjoy making progress toward the educational goals that I have set for myself; see Spence, 1985 for this argument; see also Atkinson, 1957; McClelland, 1985). However, individuals live in a society. Each individual has his/her own wishes to drive the life s/he wants, and at the same time, is regulated by social expectations and norms prevailing in his/her life (Triandis, 1994). Some Asian researchers have considered culturally-bound differences in achievement motives and claimed that individuals may also have a

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disposition to achieve a standard of excellence set by significant others (e.g., I work hard to reach the academic standards my parents set for me). Yu and Yang (1994), for example, proposed *social-oriented achievement motive* (SOAM) and juxtaposed this concept with its individual-oriented counterpart (IOAM) — the latter concept captures the essence of achievement motive widely studied in the Western tradition (Atkinson, 1957; McClelland, 1985). Yu and Yang (1994) define IOAM as the individuals' disposition to achieve a self-determined standard of excellence and pursue it according to their own way, whereas SOAM as the individuals' disposition to achieve a standard of excellence set by significant others (e.g., teachers, parents) in others-determined ways. Thus, the main distinction between IOAM and SOAM lies in the source of motives; self or others (see Yu & Yang, 1994 for more detailed accounts). Indeed, factor analysis results showed that IOAM and SOAM are conceptually distinct constructs (e.g., Abd-El-Fattah & Patrick, 2011; Bernardo, 2008, 2010; Liem, Martin, Porter, & Colmar, 2012; Liem & Nie, 2008). In addition, IOAM and SOAM showed a moderate positive correlation. For example, Abd-El-Fattah and Patrick (2011) reported a positive correlation of $r = .37$ between IOAM and SOAM based on a sample of Years 9–11 students in Australia. Bernardo (2008) reported positive correlations ranging between $r = .09$ and $r = .38$ between IOAM (which he further divided into *personal goal choice* and *personal goal standard*) and SOAM (which was sub-categorized into *parent-oriented* and *teacher-oriented achievement motives*) in his research with Filipino university students. An even stronger positive correlation ($r = .68$) between SOAM and IOAM was found by Liem et al. (2012) in their study with Indonesian high school students. These findings suggest that, as far as achievement motive is concerned, a person can be individual-oriented and social-oriented at the same time, and that individual and social expectations are not mutually exclusive. Taken together, prior research has pointed to the importance of controlling the shared variance between IOAM and SOAM in assessing their unique roles in student academic functioning.

2. Achievement motive and achievement goal

Although achievement motive and achievement goal are related constructs and both are important in student academic functioning, they are theoretically and conceptually distinct. In recent years, the literature has documented a growing interest among researchers in assessing the relational nature between achievement motives and goals (see e.g., Abd-El-Fattah & Patrick, 2011; Bernardo, 2008; Chang & Wong, 2008; Diseth & Kobbeltvedt, 2010; Elliot & Church, 1997; Elliot & McGregor, 2001). Chang and Wong (2008), for example, found that SOAM was positively related to mastery and performance goals. Bernardo (2008) found that four sub-types of IOAM and SOAM were positively correlated with mastery goals, performance-approach goals, and performance-avoidance goals, ranging from $r = .13$ to $r = .59$. Abd-El-Fattah and Patrick (2011) found SOAM positively related to mastery-approach, performance-approach, and performance-avoidance goals, whereas IOAM positively related to mastery-approach goals and negatively related to performance-approach and performance-avoidance goals. However, these studies did not comprehensively examine the relations between IOAM and SOAM and the four types of achievement goals as postulated in the 2×2 achievement goal framework (Elliot, 1999), thus providing limited information regarding their relationships. Furthermore, many of these studies focused on the zero-order correlations among achievement motives and achievement goals without controlling the common variance between IOAM and SOAM. Given the moderate correlation between IOAM and SOAM, the zero-order correlations between motives and goals might be misleading. Therefore, it is important to control the common variance in the examination of the relations between achievement motives and achievement goals. In view of this, the current study will contribute to the literature by demonstrating the relationships between IOAM and SOAM on one hand, and the four types of

achievement goal on the other hand, using path analysis to control the common variance between IOAM and SOAM.

3. Individual-oriented achievement motive as promoter of approach goals

The hierarchical model of approach and avoidance motivation (Elliot, 1999) posits that achievement motive is a key antecedent of achievement goal adoption. It is grounded in the basic premise that 1) achievement motive is a basic or general motivational disposition that energizes and orientates behavior; 2) achievement motive provides the impetus but not specific directions and, as such, more concrete goals are needed to direct behaviors; 3) achievement motive and goals work in tandem in the motivational process. This suggests that individuals' motives energize their behavior by promoting the adoption of specific goals. In other words, achievement goals emerge from their general, dispositional preferences and tendencies such as achievement motive (Elliot, 1999; Elliot & Church, 1997; Elliot, Gable, & Mapes, 2006; Elliot & McGregor, 2001). Given these basic theoretical accounts, many research studies assessing the relational nature between achievement motives and goals have conceptually positioned achievement motives as antecedents or predictors of achievement goals (see e.g., Abd-El-Fattah & Patrick, 2011; Diseth & Kobbeltvedt, 2010; Elliot & Church, 1997; Elliot & McGregor, 2001; Liem et al., 2012). Empirical studies with North American students by Elliot and his colleagues (e.g., Elliot & Church, 1997; Elliot & McGregor, 2001; Moller & Elliot, 2006) have demonstrated that (individual-oriented) achievement motive is a positive predictor of mastery-approach and performance-approach goals. For example, Elliot and Church (1997) showed that achievement motive was a positive predictor of mastery-approach and performance-approach goals, but there was no correlation between achievement motive and performance-avoidance goals (also see Diseth & Kobbeltvedt, 2010; Elliot & McGregor, 2001). This finding suggests that (individual-oriented) achievement motive promotes approach goals in that a student may attempt to outperform others (i.e., adopting performance-approach goals) or gain his/her mastery of knowledge and skills (i.e., adopting mastery-approach goals) with an aim to experience the pride of success and satisfy their need for achievement. Similarly, Abd-El-Fattah and Patrick (2011) found that IOAM positively predicted mastery-approach and performance-approach goals after controlling for SOAM. Based on the theoretical bases and previous findings, we hypothesized that positive links between IOAM and the two approach goals would hold for Chinese students.

The relationships between IOAM and avoidance goals are less theoretically discussed and empirical studies showed inconsistent findings. For example, in a sample of North American students, Elliot and Church (1997) found a negative but not significant correlation ($r = -.11$) between (individual-oriented) achievement motive and performance-avoidance goals but near-zero and positive ($r = -.02$ and $r = .12$, non-significant) in their subsequent studies (Elliot & McGregor, 2001; Elliot & Murayama, 2008). Similarly, in a study with Indonesian students, Liem et al. (2012) found non-significant correlations between IOAM and performance-avoidance and mastery-avoidance goals ($r = .03$ and $r = .06$, respectively). However, Bernardo (2008) found positive correlations ($r = .16$ and $r = .16$) between performance-avoidance goal and two sub-types of IOAM in his Filipino sample. Therefore, while the preponderance of prior findings tended to guide us to hypothesize that there would be no significant relationships between IOAM and avoidance goals, we sought to ascertain this by testing an alternative model which estimated the paths from IOAM to avoidance goals.

4. Social-oriented achievement motive as double-edged sword

However, to date, the nature of the relationships between SOAM and achievement goals remains relatively unclear. We contend that