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Running Head: SOCIAL GOALS

The Interaction between Social Goals and Self-Construal on Achievement Motivation

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Authors' Notes

The paper is based on Rebecca Wing-yi Cheng's PhD thesis completed at the University of Hong Kong.

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Abstract

The motivational effects of mastery goals and performance goals have been widely documented in previous research on achievement motivation. However, recent studies have increasingly indicated a need to include social goals so as to gain a more comprehensive understanding of achievement motivation. The purpose of the present research was to examine how social goals predicted achievement motivation among students with different self-construals (independent versus interdependent). In Study 1, 134 Chinese 8th graders completed a questionnaire on self-construal, social goals, and avoidance behaviors. In Study 2, the causal effect of self-construal and social goals on students' willingness to take a course for improvement after failure was examined with experimental manipulation. Participants were 121 Chinese 7th graders. Results demonstrated that social goals yielded higher report of avoidance behaviors (Study 1) and lower willingness to improve after failure (Study 2) for students with independent self-construal, but lower report of avoidance behaviors (Study 1) and higher willingness to improve after failure (Study 2) for those with interdependent self-construal. The research sheds light on the theoretical framework of achievement motivation that goes beyond mastery and performance goals.

Keywords: social goals, achievement motivation, self-construal, goal orientation, culture

The Interaction between Social Goals and Self-Construal on Achievement Motivation

1. Introduction

Over the past two decades, achievement goal theory has emerged as one of the most dominant theoretical frameworks for understanding student achievement motivation (Dweck & Leggett, 1988; Midgley et al., 1998). Achievement goals, defined as the reasons or purposes to achieve academically, are generally classified into two types: mastery goals and performance goals. Students who pursue mastery goals view the purpose of learning as to acquire new knowledge, while students who pursue performance goals view the purpose of learning as to demonstrate their ability to others (Ames, 1992; Dweck, 1986; Dweck & Leggett, 1988). Recent research has incorporated an approach-avoidance distinction within mastery and performance goals, resulting in four types of achievement goals: mastery-approach, mastery-avoidance, performance-approach and performance-avoidance (Elliot, 1999; Elliot & McGregor, 2001).

Although the classification of achievement goals into mastery and performance goals is well accepted among researchers, recent studies have found such a classification too simplistic. Tao and Hong (2000) argued that Chinese students have strong social reasons for wanting to achieve, for example, they wish to fulfill the expectations of their social group such as family or hometown. This is a reasonable claim because the values of Chinese achievement have a high collective and social nature (Li, 2001, 2002; Yu, 1996). Similarly, Western studies on students' social relationships and social motives also suggest that students tend to pursue some social goals, in addition to mastery and performance goals, when engaging in academic work (Dowson & McInerney, 2003; Furrer & Skinner, 2003; Juvonen & Weiner, 1993; McClelland, 1985). It is increasingly clear that achievement goal theory needs to take

account of social goals so as to gain a thorough understanding of student motivation.

In the present research, we defined social goals as students' social reasons for wanting to achieve academically (Dowson & McInerney, 2001, 2003; Urdan & Maehr, 1995). One important social reason for students to achieve is to seek social approval from authority figures. We examined how social goals predicted achievement motivation among students with different self-construals. Special attention was given to how these predictions compared to those of mastery goals and performance goals because the motivational consequences of mastery and performance goals are better-known in the existing literature, while the predictions of social goals are still underexplored.

1.1. Mastery goals and performance goals

With respect to achievement goal theory, mastery goals and performance goals have received the greatest attention. Students who pursue mastery goals view the purpose of learning as to develop new skills and understand learning materials. They focus on personal improvement rather than performance. Previous research has indicated the benefits of pursuing mastery goals, including greater persistence in the face of challenge, increased use of more elaborate study strategies, more positive attitudes towards learning and higher achievement (Ames, 1992; Ho & Hau, 2008; Kaplan, Middleton, Urdan, & Midgley, 2002). In contrast, students who pursue performance goals see the purpose of learning as to demonstrate competence to others. Researchers have usually found performance goals to be associated with maladaptive outcomes, including withdrawal in the face of challenge and the use of surface instead of deep learning strategies (Grant & Dweck, 2003). Nevertheless, some researchers have found performance goals to predict positive outcomes such as high self-efficacy and positive affect (e.g., Elliot, 1999).

To resolve the inconsistent pattern of relationship between performance goals

and motivation outcomes, Elliot (1999) incorporated an approach-avoidance distinction into performance goals. Performance-approach goals represent students' desire to look competent in front of others, while performance-avoidance goals represent their desire to avoid looking dumb. In general, performance-avoidance goals have been found to predict more negative outcomes than those of performance-approach goals, including higher levels of anxiety, avoidance of help seeking, and self-handicapping strategies, as well as lower self-efficacy and lower grades (Elliot, 1999; Ho & Hau, 2008; Lau & Lee, 2008; Urdan, Ryan, Anderman, & Gheen, 2002).

Elliot (1999) also extended the approach-avoidance distinction to mastery goals. Mastery-approach goals represent students' concern with understanding material or mastering a task, while mastery-avoidance goals represent their concern with avoiding misunderstanding material or failing to complete a task. Limited research has been carried out to investigate the consequences of pursuing mastery-avoidance goals. In a series of studies by Elliot and McGregor (2001), mastery-avoidance goals were related to disorganized studying and negative emotion such as test anxiety and worry. Their pattern of consequences is believed to be more negative than that of mastery-approach goals, but more positive than that of performance-avoidance goals.

1.2. Social goals

Mastery and performance goals have been well documented in the literature. However, the understanding of achievement goals cannot be complete without the study of social goals. According to Urdan and Maehr (1995), social goals are the social reasons for trying to succeed academically. They have proposed some examples of social goals, including social approval goals (studying to gain approval from teachers) and social solidarity goals (studying to bring honor to one's family). In line with this definition, Dowson and McInerney (2001, 2003) identified a number of

social goals including social affiliation goals, social approval goals, social responsibility goals, social status goals and social concern goals. They found that students do not hold these goals in isolation. Instead, different goals interact in conflicting, converging and compensatory ways to affect students' motivation and performance. These social goals, like mastery goals and performance goals, are defined in the framework of achievement goal theory, that is, they are the reasons why students wish to achieve academically. In the present research, we follow this line of thought in defining social goals.

Some researchers have studied the effects of social goals on motivation and achievement. However, the definition of social goals in their studies is not within the framework of achievement goal theory. For instance, Wentzel (1994, 1998, 2000, 2002) and her colleagues (Wentzel, Battle, Russell, & Looney, 2010) were concerned with *what* students try to achieve socially in school instead of *why* they want to succeed academically. In line with this conceptualization, Patrick, Anderman, and Ryan (2002) considered social goals as the students' intentions or willingness to interact with others. Although these researchers do not start out from the framework of achievement goal theory, they have made a substantial contribution to the research on social goals. They have identified the most prevalent social goals (e.g., social responsibility goals, prosocial goals, social relationship goals, social status goals) and have specified how these may affect student motivation and behaviors.

Recently, a group of researchers investigated social achievement goals that refer to students' orientations toward the attainment of social competence (Gable, 2006; Horst, Finnery, & Barron, 2007; Roussel, Elliot & Feltman, 2011; Ryan & Shim, 2006, 2008). These researchers are interested in how the demonstration of high social competence and avoidance of demonstrating low social competence predict social adjustment. As their concern lies in social competence, not academic achievement, the

focus of their studies does not align with ours. Despite the divergence in the definitions of social goals, their studies have contributed to the extension of achievement goal theory from academic to social domains.

In the present research, we define social goals as students' social reasons for wanting to achieve academically, in accordance with the suggestions of Urdan and Maehr (1995) and Dowson and McInerney (2001, 2003). Our focus was one particular form of social goals: to succeed academically in order to gain the social approval of authority figures, which is a subset of a large pool of social reasons for trying to achieve academically. Social reasons involve interaction with others. As authority figures are significant others to students and have a strong influence on student motivation, the present research investigated what would happen when students studied hard in order to gain the social approval of authority figures. This approach is different from that of previous researchers who asked students how often they sought social approval from authority figures (e.g., Wentzel, 1994, 1998, 2000, 2002), or those who asked students whether they focused on developing or demonstrating social competence with no reference to their reasons for trying to excel academically (e.g., Roussel, Elliot & Feltman, 2011; Ryan & Shim, 2006, 2008). The social goals being investigated in the present research concern *why* students try to succeed. By defining social goals in parallel with those of mastery goals and performance goals, the present research was thus in a better position to investigate social goals within achievement goal theory.

The social goals to succeed academically in order to gain approval from authority figures are very similar to performance goals. Indeed, some researchers questioned the distinction between the two goals (Nicholls, Patashnick, & Nolen, 1985; Nolen, 1988). For example, Nicholls, Patashnick and Nolen developed the scale "Ego and Social Orientation" to measure students' goal orientation. This scale

includes items that measure performance goals (e.g., “I feel most successful if I show people I’m smart”) as well as items that measure social approval goals (e.g., “I feel most successful if the teacher likes my work”). Results indicated that these items have a high correlation with each other and can form one reliable scale. In a recent study with social goals defined as goals to please significant others, Leondari and Gonida (2007) also found that social goals were correlated positively with performance goals and the use of self-handicapping strategies.

However, these two goals may not be identical constructs. According to achievement goal theory, performance goals are *ego-involved goals*, the desire to look good in front of others. Such ego-involved goals, which focus on self-demonstration, should be conceptually different from social goals, which focus on gaining social approval from others including authority figures. Maehr and Nicholls (1980) suggested that the purpose of social goals is to indicate personal commitment rather than ability, which points to the clear distinction between social goals and performance goals. Maehr (1984) also argued that, to gain social approval, showing willingness to learn seems more important than demonstrating competence. Students need to indicate their good intentions in learning so as to please their significant others. In a more recent study, Dowson and McInerney (2003) also treated performance goals and social goals as two distinct types of goals.

1.3. Social goals and self-construals

To reconcile the opposing viewpoints, Urdan and Maehr (1995) proposed that social goals should be studied with reference to self-construal (independent self-construal versus interdependent self-construal). They suggested that whether social goals are similar to performance goals depends on people’s self-construal. According to Markus and Kitayama (1991), people with independent self-construal emphasize the separateness and uniqueness of individuals. They identify themselves

as different from others and thus focus on individual achievement. By contrast, people with interdependent self-construal emphasize connectedness and relationships. They identify themselves as members of their ascribed social groups and thus focus on the collective outcome of their groups. In fact, people possess both independent and interdependent self-construals but the environment can promote stronger endorsement of one self-construal over another. Although the environment may strongly determine people's self-construal that is chronically accessible, certain situational demands may change the salience of people's self-construal temporarily. Therefore, previous research has measured self-construal by self-reported scales (e.g., Singelis, 1994) and also manipulated self-construal by situational prime (e.g., Stapel & Koomen, 2001).

Urdan and Maehr (1995) posited that trying to succeed academically in order to gain social approval from authority figures does not have the same meaning for people with different self-construals. People with independent self-construal see achievement as individual accomplishment. Therefore, studying in order to gain social approval from authority figures may be related to an ego-involved goal, which implies a demonstration of ability to authority figures. In this case, social goals and performance goals are akin to each other. By contrast, people with interdependent self-construal see achievement in a more collectivistic way. Instead of viewing achievement as an individual endeavor, they see it largely as a social endeavor that involves family interests, such as winning glory for the family. Studying to gain social approval from authority figures may not be ego-involved for them. Instead, it may represent an internalization of achievement goals espoused by authority figures such as teachers and parents. Almost all teachers and parents want their students or children to learn. Children will be likely to value learning if they have internalized their teachers' and parents' expectations. Thus, for people with interdependent self-construal, social goals and performance goals may not be akin to each other.

Rather, social goals may be more similar to mastery goals than to performance goals.

The suggestions by Urdan and Maehr (1995) receive theoretical support from the literature on cultural differences in motivation. In the Western literature, attempting to do well to please authority figures would be described as an extrinsic orientation (Harter, 1981), or an introjected regulation that involves external locus of causality (Ryan & Deci, 2000). However, according to self-determination theory, relatedness is one of the important facilitators of internalization (Ryan & La Guardia, 2000; Ryan, Stiller, & Lynch, 1994). If people have strong feelings of belongingness and connectedness with authority figures, they may internalize the values of authority figures. Thus, for people with interdependent self-construal, working to gain the social approval of authority figures may not be an externally controlled behavior as proposed in the Western literature. Instead, it may represent a more internalized and learning-oriented form of behavior. As further supported by the socialization literature, the desire to obtain adult approval can be a powerful facilitator of internalization, an important precursor of the development of intrinsic motivation (Blumenfeld, 1992).

For people with interdependent self-construal, pleasing others is not necessarily oppositional to seeking challenge, being curious, and desiring independent mastery of knowledge. Lepper, Corpus, and Iyengar (2005) found that the correlation between intrinsic motivation and the desire to please the teacher was negative for Caucasian students (r = -.14) but positive for Chinese students (r = .15). Their results suggest that children who endorse independent values may see pressure from parents or teachers as an externally imposed constraint, whereas children who endorse interdependent values may see it as a useful support that serves the needs of the family and society. The way people define social goals depends on the way they define themselves in relation to others. Despite the significant impact of culture on the development of self-construal, there are individual differences within culture. As

suggested by Cross, Hardin, and Gercek-Swing (2011), self-construal describes individuals more than cultures.

1.4. Overview of the present research

Previous studies on social goals have rarely considered self-construal as the moderator of the effects of social goals on motivation. The present research is a pioneering attempt to examine social goals within the context of self-construal. Despite the approach-avoidance distinction in mastery and performance goals (Elliot, 1999; Elliot & McGregor, 2001), the present research was limited to the approach dimension because the social goals to succeed academically in order to gain approval from authority figures are situated in an approach rather than an avoidance framework.

The present research was conducted with Chinese students, who have been found to endorse social goals more than Caucasian students (Cheng & Lam, 2009). In a collectivistic culture, Chinese students have strong social reasons for wanting to achieve academically (Hau & Ho, 2010; Li, 2001, 2002; Tao & Hong, 2000; Yu, 1996). Under the influences of the Confucian-collectivistic tradition in Chinese culture, Chinese students are expected to fulfill social obligation to authority figures including parents and teachers. Students work hard not only for their “small self” but also for their “big self” that involves significant others (Hwang & Han, 2010). Academic achievement in Chinese culture is not simply an individual endeavor but also a social-cultural endeavor. The high prevalence of social goals in Chinese culture provides excellent grounds for the investigation of social goals. The effects of mastery and performance goals have been investigated in Chinese culture and the results in general concur with that in the Western literature (e.g., Ho & Hau, 2008; Lau & Lee, 2008). However, the effect of social goals is underexplored and this is an area that definitely requires more attention especially in Chinese culture where social goals are

highly emphasized.

The present research consisted of two studies that investigated how social goals predicted achievement motivation among students with different self-construals. Study 1 was a correlational study with naturalistic data. The motivational outcomes of social goals were compared between those who scored high and those who scored low on the independence and interdependence dimensions of the Self-Construal Scale (Singelis, 1994). The dependent variable was self-reported avoidance behaviors. Study 2 was an experiment with both self-construal and social goals manipulated in authentic classrooms. The dependent variable was students' choice of either a course to improve or a course to avoid looking bad after failure. For both studies, it was expected that the effects of social goals on achievement motivation would be moderated by self-construal. For the students with high independent self-construal, the effects of social goals would be similar to those of performance goals, i.e., these students would report a high tendency towards avoidance behaviors (Study 1) and display a low degree of willingness to improve after failure (Study 2). On the other hand, for the students with high interdependent self-construal, the effects of social goals would be similar to those of mastery goals, i.e., these students would report a low tendency towards avoidance behaviors (Study 1) and display a high degree of willingness to improve after failure (Study 2).

2. Study 1

In Study 1, the use of self-handicapping strategies and the tendency to avoid seeking help were examined because these two types of avoidance behaviors were commonly investigated in the previous research on goal orientation (e.g., Turner, Midgley, Meyer, Gheen, Anderman, & Kang, 2002). People develop avoidance behaviors because they would like to deflect others' attention from their ability or performance so as to protect self-worth (Covington, 1992). Avoidance behaviors were

found to be more prevalent for students with performance goals (e.g., Leondari & Gonida, 2007) and in classrooms where performance goals were highly emphasized (e.g., Karabenick, 2004). In the present research, avoidance behaviors but not positive outcomes were included because the literature indicates that the outcomes of endorsing different types of goals would be most distinct when students are working under unfavorable condition such as failure (Dweck, 1986; Dweck & Leggett, 1988).

According to Midgley, Arunkumar, and Urdan (1996), self-handicapping behaviors can be seen as a sign of purposeful disengagement from school. Students use these strategies so that if their subsequent performance is low, they can use other reasons to explain away their lack of ability (Midgley et al., 2000). There is increasing evidence that self-handicapping is primarily a self-presentational strategy (Rhodewalt, Morf, Hazlett, & Fairfield, 1991). This helps to explain why performance goals, which are ego-involved, are always correlated positively with self-handicapping behaviors (Leondari & Gonida, 2007; Midgley et al., 1996; Pyszczynski & Greenberg, 1983), while mastery goals, which are improvement-oriented, are correlated negatively with self-handicapping behaviors (Ryska, Yin, & Boyd, 1999).

Avoidance of help seeking refers to occasions when students need help but do not seek it (Ryan & Pintrich, 1997). Many students perceive help seeking as evidence that they lack ability and thus, will incur negative judgments from others (Ryan, Pintrich, & Midgley, 2001). Previous research has indicated consistently that those who pursue mastery goals are less likely to avoid help seeking because they focus on learning the task and not on demonstrating ability. However, those who pursue performance goals are more likely to avoid help seeking because they focus on looking smart in front of others (Ryan & Pintrich, 1997).

Study 1 investigated how goal orientation, self-construal and their interaction predicted self-reported avoidance behaviors. Self-construal was expected to interact

significantly with social goals but not with mastery or performance goals to predict avoidance behaviors. Three hypotheses were formulated:

Hypothesis 1: Disregarding the levels of independent or interdependent self-construals, mastery goals will predict low report of avoidance behaviors.

Hypothesis 2: Disregarding the levels of independent or interdependent self-construals, performance goals will predict high report of avoidance behaviors.

These two hypotheses were based on the previous literature on mastery and performance goals.

Hypothesis 3: The levels of independent or interdependent self-construals will moderate the relationships between social goals and avoidance behaviors. According to the suggestions by Urdan and Maehr (1995), the outcomes of endorsing social goals are similar to those of mastery goals for students with high interdependent self-construal, and similar to those of performance goals for students with high independent self-construal. Therefore, two sub-hypotheses were also formulated:

Hypothesis 3a: For those with high interdependent self-construal, social goals will predict low report of avoidance behaviors; while for those with low interdependent self-construal, social goals will predict high report of avoidance behaviors.

Hypothesis 3b: For those with high independent self-construal, social goals will predict high report of avoidance behaviors; while for those with low independent self-construal, social goals will predict low report of avoidance behaviors.

2.1. Method

2.1.1. Participants

The participants were 134 Chinese eighth-graders (60 males, 74 females) with a mean age of 14.26. They were recruited from a government-subsidized secondary school in Hong Kong. The school is situated in a middle to lower-class neighborhood

and has an average academic standard when compared to the Hong Kong student population. Parental consent for all the participants was obtained before the research started.

2.1.2. Procedure

Participants were asked to complete a 20-minute questionnaire. The questionnaires were group-administered in their classrooms on a normal school day. Participants were told that the questionnaire was about their feelings toward mathematics. They were assured that all information provided by them would be kept confidential and would be used for research purposes only.

2.1.3. Measures

The questionnaire comprised measures of self-construal, mastery goals, performance goals, social goals, self-handicapping behaviors, and avoidance of help seeking. All questionnaire items were in Chinese and the back translation procedure was employed to make sure that the Chinese items were consistent with the original English items. Except for the self-construal measures, all measures were adapted to be specific to the mathematics domain.

2.1.3.1. Self-construal

The Chinese version of the Self-Construal Scale (SCS) (Singelis, 1994) was used to measure the thoughts, feelings, and behaviors of the students, with independent and interdependent self-construals as two separate dimensions. The SCS is the most common measure of independent and interdependent self-construals (Cross, Hardin, & Gercek-Swing, 2011). It has been used in hundreds of studies covering different age groups including students in middle school (e.g., Yeh, 2002). Of the 30 items in the SCS, 15 were in the independent subscale (e.g., “My personal identity, independent of others, is very important to me”). The remaining 15 items were in the interdependent subscale (e.g., “It is important for me to maintain harmony within my group”).

Students were required to rate their levels of agreement with each item on a 7-point scale from 1 (“strongly disagree”) to 7 (“strongly agree”). Exploratory and confirmatory factor analyses have been conducted to confirm the reliability and validity of the SCS (Singelis, 1994). Cronbach’s α for the scores in the independent and interdependent subscales were .71 and .74 respectively in the present study.

2.1.3.2. Mastery goals and performance goals

Scales that measured mastery goals and performance goals were adapted from the Patterns of Adaptive Learning Scales (PALS) (Midgley et al., 2000). The mastery goal scale measured the students’ willingness to extend their mastery and understanding in an achievement setting. The five items in the scale included items such as “One of my goals is to master a lot of new skills in math this year”. The performance goal scale measured students’ tendency to demonstrate their competence. Its five items included items such as “One of my goals is to show others that I’m good at math”. For both scales, students were required to rate their levels of agreement with each item on a 5-point scale from 1 (“strongly disagree”) to 5 (“strongly agree”). Cronbach’s α for the scores in both scales were .78, indicating adequate scale reliability.

2.1.3.3. Social goals

Six items were developed to measure the students’ tendency to study in order to gain the social approval of authority figures. The items were adapted from Dowson and McInerney (2003) and were designed parallel to the items in the mastery goal and performance goal scales. Of the six items in the social goal scale, three referred to doing schoolwork for the social approval of parents (e.g., “I do math exercise so as to let my parents think I am a good son/daughter”). The other three items referred to doing schoolwork for the social approval of teachers (e.g., “The reason I pay attention in math class is to impress my teacher”). Students were required to indicate how much

they agreed with each item on a 5-point scale from 1 (“strongly disagree”) to 5 (“strongly agree”). Cronbach’s α for these six item-scores was .80 in the present study, thus indicating adequate internal consistency.

2.1.3.4. Self-handicapping behaviors

The scale of academic self-handicapping strategies in the Patterns of Adaptive Learning Scales (PALS) (Midgley et al., 2000) was used. It measured students’ likelihood of using strategies to explain away their low performance. The Chinese version of the scale was adapted from Li (2002). There were six items in the scale, such as “Some students fool around the night before a math test. Then, if they don’t do well, they can say that is the reason. How true is this of you?” Students were required to rate each item on a 6-point scale from 1 (“not at all true of me”) to 6 (“very true of me”). Cronbach’s α for these six item-scores was .73 in the present study.

2.1.3.5. Avoidance of help seeking

The scale for measuring avoidance of help seeking was adapted from items developed by Middleton and Midgley (1997), and Ryan and Pintrich (1997). The scale consisted of five items that measured students’ avoidance of help seeking when needed in class (e.g., “I don’t ask questions in math class, even when I don’t understand the lesson”). Students were required to rate their levels of agreement with each item on a 6-point scale from 1 (“strongly disagree”) to 6 (“strongly agree”). Cronbach’s α for the five item-scores was .87 in the present study.

2.1.4. Multiple regression analyses

Hierarchical regression analyses were conducted to examine whether self-construal × goal orientation interaction had any significant unique contribution to predict avoidance behaviors above and beyond the main effect of self-construal and the main effect of goal orientation. All predictor variables were converted to “centered

scores" which were the difference between the scores and the mean. The interaction terms were derived from the product of the centered scores (Aiken & West, 1991). Using centered scores to create the interaction terms helps control multicollinearity between the interaction terms and the lower order terms that are used to produce them.

In the first step of the hierarchical regression analysis, all predictor variables (independent self-construal, interdependent self-construal, and goal orientation) were entered into the model simultaneously. Independent and interdependent self-construals were entered as separate variables because the two aspects of the self were found to be separate factors but not opposite poles of a single construct (Singelis, 1994). In the second step of the regression, interaction terms for independent self-construal × goal orientation and interdependent self-construal × goal orientation were entered into the model. Separate hierarchical regression analyses were conducted for each type of goal orientation and for each type of avoidance behavior, using the same procedure as described above.

2.2. Results

2.2.1. Descriptive statistics and correlation analyses

Table 1 presents the descriptive statistics and bivariate correlations of the variables. Social goals, mastery goals, and performance goals were correlated positively with one another. It is also noteworthy that independent and interdependent self-construals were correlated positively with each other. Such a result concurred with that in the West, confirming that these two aspects of the self are separate factors but not opposite poles of a single construct (Singelis, 1994). Interestingly, social goals were correlated positively with both independent and interdependent self-construals. This demonstrates that social goals are applicable for people holding either type of self-construal. As expected, mastery goals were correlated negatively with avoidance of help seeking, while performance goals were correlated positively with

self-handicapping behaviors. Social goals were not correlated significantly with either self-handicapping behaviors or avoidance of help seeking.

2.2.2. Hierarchical regression analyses

2.2.2.1. Analysis one: Predictions of mastery goals and self-construal

In the first step of the regression, independent self-construal, interdependent self-construal, and mastery goals were entered into the model. As shown in Table 2, the three variables altogether accounted for 5% of the variance in self-handicapping behaviors ($\Delta R^2 = .05$, $p = .12$) and 13% of the variance in avoidance of help seeking ($\Delta R^2 = .13$, $p = .001$). Consistent with Hypothesis 1, mastery goals predicted low report of avoidance of help seeking ($\beta = -.22$, $p = .02$). However, mastery goals did not emerge as a significant predictor of self-handicapping behaviors ($\beta = -.16$, $p = .08$) although the negative association between the two variables was in the expected direction. In the second step of the analysis, independent self-construal × mastery goals interaction and interdependent self-construal × mastery goals interaction were added into the model. As expected, none of the interactions emerged as a significant predictor of self-handicapping behaviors (βs < .10, ps > .05) or avoidance of help seeking (βs < .20, ps > .05). The interaction terms did not explain significant additional variance in self-handicapping behaviors ($\Delta R^2 = .00$, $p = .81$) or avoidance of help seeking ($\Delta R^2 = .03$, $p = .09$).

2.2.2.2. Analysis two: Predictions of performance goals and self-construal

In the first step of the regression, independent self-construal, interdependent self-construal, and performance goals were entered into the model. As shown in Table 3, the three variables altogether accounted for 9% of the variance in self-handicapping behaviors ($\Delta R^2 = .09$, $p = .01$) and 8% of the variance in avoidance of help seeking ($\Delta R^2 = .08$, $p = .02$). Performance goals significantly predicted high report of self-handicapping behaviors ($\beta = .27$, $p = .004$). Such a result provided support for

Hypothesis 2. However, performance goals did not emerge as a significant predictor of avoidance of help seeking (β = -.06, p = .55). In the second step of the analysis, independent self-construal × performance goals interaction and interdependent self-construal × performance goals interaction were added into the model. As expected, none of the interactions emerged as a significant predictor of self-handicapping behaviors (βs < .10, ps > .05) or avoidance of help-seeking (βs < .10, ps > .05). The interaction terms did not explain significant additional variance in self-handicapping behaviors (ΔR^2 = .00, p = .95) or avoidance of help seeking (ΔR^2 = .01, p = .79).

2.2.2.3. Analysis three: Predictions of social goals and self-construal

In the first step of the regression, independent self-construal, interdependent self-construal, and social goals were entered into the model. As shown in Table 4, the three variables altogether accounted for 4% of the variance in self-handicapping behaviors (ΔR^2 = .04, p = .20) and 8% of the variance in avoidance of help seeking (ΔR^2 = .08, p = .02). Unlike mastery and performance goals, social goals did not emerge as a significant predictor of either self-handicapping behaviors (β = .13, p = .17) or avoidance of help seeking (β = -.09, p = .33). In the second step of the analysis, independent self-construal × social goals interaction and interdependent self-construal × social goals interaction were added into the model. The two interaction terms explained an additional 13% (p < .001) of the variance in self-handicapping behaviors and an additional 6% (p = .04) of the variance in avoidance of help seeking. Specifically, interdependent self-construal × social goals interaction emerged as a significant contributor (β = -.39, p < .001) to the explanation of variance in self-handicapping behaviors, while independent self-construal × social goals interaction surfaced as a significant contributor (β = .23, p = .02) to the explanation of variance in avoidance of help seeking.

Simple slope analysis (Aiken & West, 1991) was adopted for post hoc probing into the interdependent self-construal × social goals interaction on self-handicapping behaviors and the independent self-construal × social goals interaction on avoidance of help seeking. The results are presented graphically in Figures 1a and 1b respectively. In Figure 1a, three lines are plotted representing students with low (-1 *SD*), average (*M*) and high (+1 *SD*) levels of interdependence and the y-axis represented the level of self-handicapping behaviors. In Figure 1b, three lines are plotted representing students with low (-1 *SD*), average (*M*) and high (+1 *SD*) levels of independence and the y-axis represents the level of avoidance of help seeking.

As shown in Figure 1a, the slope of the line representing high level of interdependence is negative and significant (β = -.35, p = .02), while the slope of the line representing low level of interdependence is positive and significant (β = .54, p < .001). These results were consistent with Hypothesis 3a: For those with high interdependent self-construal, social goals would predict low report of self-handicapping behaviors; and for those with low interdependent self-construal, social goals would predict high report of self-handicapping behaviors.

Figure 1b presents results that mirror those in Figure 1a. As shown in Figure 1b, the slope of the line representing high level of independence is positive although non-significant (β = .09, p = .44), while the slope of the line representing low level of independence is negative and significant (β = -.30, p = .02). These results partially supported Hypothesis 3b: For those with low independent self-construal, social goals would predict low report of avoidance of help seeking.

2.3. Discussion

The results of Study 1 demonstrated the expected outcomes of endorsing different types of goals. Consistent with the literature on achievement goal theory, mastery goals predicted low report of avoidance behaviors and performance goals

predicted high report of avoidance behaviors, regardless of the level of independent or interdependent self-construals. While self-construal did not act as a moderator of how mastery goals and performance goals predicted avoidance behaviors, the interaction between self-construal and social goals was found to be significant. Social goals predicted low report of avoidance behaviors for those with high interdependent or low independent self-construal, but high report of self-handicapping behaviors for those with low interdependent self-construal.

The differential effects of self-construal and social goals on self-handicapping behaviors and avoidance of help seeking may due to the nature of the two types of avoidance behaviors. Self-handicapping is a self-presentational strategy in which students need to *actively* create excuses to explain away their lack of ability and thus it may be more sensitive to interdependent self-construal that emphasizes on interpersonal relationship and group harmony. In contrast, avoidance of help seeking is an *inactive* form of avoidance in which students do not request help when necessary and thus it may be more sensitive to independent self-construal that focuses on the self than others. These explanations on the differential effects are just our speculation and further research is needed to confirm the nature and functioning of the two types of avoidance behaviors. In general, the findings indicate that social goals predict lower report of avoidance behaviors for people with interdependent self-construal than for those with independent self-construal.

Although the present study showed that the association between social goals and avoidance behaviors was moderated by self-construal, these results should be interpreted with caution since a correlational study cannot support any causal relationship. Moreover, the study relied heavily on self-report measures. The self-reported avoidance behaviors might not accurately reflect actual behavioral outcomes. As social goals and self-construal were also self-reported, the predictor and

criterion variables shared the same source of variance and thus limited the validity of the findings. In addition, the psychological mechanism underlying the moderation effect of self-construal was not investigated. To address these limitations, self-construal and social goals were manipulated in Study 2 to ascertain the causal relationship. Besides, behavioral measure was included and students' internalization of social goals was also measured in Study 2 to explore the possible mechanism underlying the moderation effect of self-construal.

3. Study 2

Study 2 was an experiment in which both self-construal and social goals were manipulated in authentic classrooms. It was a 2 × 2 between-subject design with two levels of self-construal (independent self-construal versus interdependent self-construal) and two levels of social goals (with social goals versus without social goals). Behavioral outcomes that revealed whether students chose a course to make improvement or chose a course to avoid looking bad after experience of failure were compared across the four conditions. A measure of internalization was also included to uncover the underlying mechanism that might account for the different effects of social goals for people primed with different self-construals.

As in Study 1, it is expected that the priming of independent or interdependent self-construals will moderate the effects of social goals on achievement motivation. Specifically, two hypotheses were proposed:

Hypothesis 1: For the students who are primed with independent self-construal, social goals will prompt a lower willingness to choose a course that promotes improvement or a higher willingness to choose a course to avoid looking bad.

Hypothesis 2: For the students who are primed with interdependent self-construal, social goals will prompt a higher willingness to choose a course that promotes improvement or a lower willingness to choose a course to avoid looking bad.

3.1. Method

3.1.1. Participants

The participants were 121 Chinese seventh-graders (63 males, 58 females) with a mean age of 12.52. They were recruited from a government-subsidized secondary school in Hong Kong. The school was situated in a middle to lower-class neighborhood and had an average academic standard when compared to the Hong Kong student population. Parental consent was received for all participants before the experiment started.

3.1.2. Design

The experiment employed a 2 × 2 between-subject design. Participants were assigned randomly to one of the four experimental conditions: 1) independent self-construal with social goals (n = 31); 2) independent self-construal without social goals (n = 29); 3) interdependent self-construal with social goals (n = 32); and 4) interdependent self-construal without social goals (n = 29). The four experimental conditions were conducted concurrently and separately in four classrooms in the school. To control the content of instruction, standard scripts were supplied for all the experimenters. The experiment was conducted on a normal school day, and the participants spent about half-an-hour of their free time after lunch to participate in this experiment.

3.1.3. Procedure and manipulations

In all the classrooms, participants were told that they would do two language tasks. The first was an English language task and the second a Chinese language task. Thereafter, the experimenter explained the alleged purpose of the study to the participants. The cover story involved the manipulation of social goals.

3.1.3.1 Social goals manipulation

In the two conditions with social goals, participants were asked to do the tasks

for the social approval of their teachers. Participants were informed that the purpose of the study was to assess the teaching quality of their English and Chinese teachers. They were told that the assessment of their teachers' teaching quality would be based on their performances on the two language tasks. Students were then asked to try their best in the two tasks so that their teachers could receive good evaluations of their teaching. In the two conditions without social goals, participants were just told that the purpose of the study was to investigate the language ability of seventh-graders in Hong Kong.

3.1.3.2. English task

After delivering the instructions, participants performed the English language task, which was in fact used to induce failure experience in participants. This was a comprehension exercise and the participants were required to answer 10 multiple-choice questions after reading a short English passage. All answers were to be marked on a multiple-choice answer sheet, and participants were given 10 minutes to complete the task. The passage and the questions were adopted from an English textbook (Kent, 2001) for ninth-graders. A pilot study had been done to check the difficulty level of the English task. In a sample of 10 seventh-graders, only 3.8 questions were answered correctly on average. Based on the results of this pilot study, it was established that this English task could induce students' experience of failure.

After all participants had finished the English task, the experimenter announced that her assistant would score their answers by computer scanning. They were told that each of them would receive a computerized individual result slip after the scoring was completed. As the scanning process took time, the participants were required to do the Chinese task during this time-gap.

3.1.3.3. Chinese task and self-construal manipulation

The Chinese task was described as a reading comprehension exercise, but it was

in fact used to manipulate self-construal. Unlike previous studies using priming procedures that looked contrived to secondary school students (Brewer & Gardner, 1996; Stapel & Koomen, 2001), the present study used a reading comprehension exercise, a common learning experience in schools, as the priming procedure. Using manipulation that looked natural and authentic to the students not only increased the credibility of the cover story, but also increased the ecological validity and practical relevance of the study. This manipulation procedure was similar to the one adopted by Hong, Chiu, Dweck, Lin, and Wan (1999). Participants were required to read an article that advocated either independent or interdependent self-construals. The *independent self-construal* article promoted individualism by emphasizing the importance of one's uniqueness and distinctiveness. It stated, for example, "Everyone is unique and different from the others on earth." The *interdependent self-construal* article promoted collectivism by emphasizing the importance of relatedness and connectedness. It stated, for example, "Living harmoniously is very important to everyone on earth."

3.1.3.4. Manipulation check: Self-construal

To check whether the two articles had successfully primed independent or interdependent self-construal in the participants, we asked the participants to indicate how much they agreed with the article that they had just read on a 7-point scale, from 1 ("strongly disagree") to 7 ("strongly agree"). We also needed to check whether the participants had understood the articles accurately. We presented them with a 10-minute comprehension task that included ten fill-in-the-blanks items. To check further whether they perceived the article as easy to understand, they were asked, "Is it easy to understand the article?" They responded on a 7-point scale, from 1 ("very difficult") to 7 ("very easy").

3.1.3.5. Manipulation check: Social goals

After the participants had completed both the English and Chinese tasks, they were asked to indicate the purpose of these tasks. For the English task, they were asked to indicate whether the purpose was “to assess the teaching quality of my English teacher” or “to know the English language ability of seventh-graders in Hong Kong.” The same questions were repeated for the Chinese task but with the word “English” replaced by the word “Chinese.” These questions checked whether the participants remembered the alleged purpose of the study clearly when they were working on the tasks.

3.1.3.6. Manipulation check: Internalization

To investigate further whether the participants had *adopted* or *internalized* the social goals as manipulated, they were asked, “Why did you work on the English task?” Two reasons were provided: “to get a good English result for myself” and “to get a good result for my English teacher.” The participants were required to indicate their levels of agreement with each reason on a 7-point scale, from 1 (“strongly disagree”) to 7 (“strongly agree”). The same question was repeated for the Chinese task but with the word “English” replaced by the word “Chinese.” Participants who reported high agreement with the statement that they worked for their teacher were believed to have internalized social goals to a high degree.

3.1.3.7. Manipulation check: Failure experience in the English task

After the participants had completed the questions about the purpose of the language tasks and internalization, an assistant of the experimenter came into the classroom to distribute result slips for the English task. Each participant received a computerized individual result slip. Everyone had a particularly poor result: 4 marks out of 10. The pilot study had indicated that 4 marks should be a poor but believable performance for students. To check whether the English task had induced participants’ experience of failure, the participants were required to evaluate their own

performances after receiving the result slip. They were asked how satisfied they were with their performances on the English task. They indicated their levels of satisfaction on a 7-point scale, from 1 (“very dissatisfied”) to 7 (“very satisfied”).

3.1.3.8. Behavioral outcome: Course choice

After the participants had completed the failure manipulation check, the experimenter informed them that they would need to do the English task again one month later. Prior to the second assessment, they would be required to take an English course to improve their English ability. Two courses were provided and participants should choose from either of them. Subsequently, the experimenter described the two courses, Course A and Course B. The experimenter announced, “*In Course A, we will employ tailor-made teaching methods to cater for students’ individual needs. Teaching materials and resources have been tried out in tertiary institutions and have been found to be useful in helping students improve their English ability. However, as the resources are limited, we can only accommodate those students who got 5 marks or below for the English task.*” Course A was described in such a way that students who chose this course were willing to make an effort to improve after failure, but it meant that they had to reveal their poor performances to others. The experimenter then described Course B, “*In Course B, we simply do the teaching as usual. As we cannot cater for students’ individual needs, it is difficult to guarantee that students will make a substantial improvement in English by taking the course. All students can join this course*.” Course B was described in such a way that students who chose this course could avoid looking bad in front of others, but they would lose a valuable opportunity for improvement. After explaining the differences between the two courses, the participants were required to choose either Course A or Course B by placing a tick on the questionnaire given to them.

3.1.3.9. Confounding variables: Relationship with English teacher, self-efficacy in

learning English, and chronic goal orientation

To ensure that the results of the current experiment were not confounded by the students' relationship with their English teacher, their perceived self-efficacy in learning English and their chronic goal orientation (including mastery goals, performance goals and social goals) in studying English, all these variables were measured in a questionnaire that was administered prior to the experiment. These confounding variables were measured because previous literature has demonstrated their associations with motivational outcomes (e.g., Bandura, 1997; Furrer & Skinner, 2003; Kaplan, Middleton, Urdan, & Midgley, 2002). All questionnaire items were adapted to be specific to studying English. Students' relationship with the English teacher was measured by the Teacher Involvement Scale (Skinner, Wellborn, & Connell, 1990), while their self-efficacy in learning English was measured by the Academic Efficacy Scale developed by Midgley and her colleagues (2000). Measures of mastery goals and performance goals were the same as those used in Study 1. The measure of social goals consisted of the three items intended to determine if students were studying for the social approval of teachers in Study 1. The students were required to indicate their levels of agreement to all items on a 7-point scale, from 1 ("strongly disagree") to 7 ("strongly agree"). In the present study, Cronbach's α reliability coefficient was .82 for relationship with the English teacher, .76 for self-efficacy in learning English, .79 for mastery goals, .84 for performance goals, and .65 for social goals, indicating acceptable internal consistencies for the scales.

3.1.3.10. Debriefing

On completion of the experiment, all participants were debriefed thoroughly. They were told that the purpose of the research was not to assess the teaching quality of their teachers, or to investigate the language ability of seventh-graders in Hong Kong. They were also told that the English task was very difficult for them and that

no English courses had been arranged. The experimenter apologized for the deception and explained its rationale as well as the design of the experiment. After the debriefing, the participants were thanked and dismissed. Six months later, the researcher revisited the school and presented the results to all the participants for educational purposes in a seminar.

3.2. Results

3.2.1. Manipulation check: Social goals

To ensure that participants in the social goals conditions had got the message about social goals, they were asked about the alleged purpose of the study. Of the participants who were primed with social goals, 19.0% (12 out of 63) failed to indicate that the purpose of the study was to assess the teaching quality of their teachers. Of the participants who were not primed with social goals, 3.4% (2 out of 58) indicated wrongly that the purpose of the study was to assess the teaching quality of their teachers, but not the language ability of seventh-graders in Hong Kong. The results showed a significant relationship between social goals manipulation and participants' choice of purpose, X^2 (1, N = 121) = 72.78, p < .001. The results indicated that the manipulation of social goals was successful for the majority of the participants although 14 participants did not get the message correctly. As the manipulation of social goals was not successful for these 14 participants, they were excluded from the sample for further analyses, leaving 107 participants in the study. These included 53 males and 54 females with an average age of 12.56. There were 28 participants in the condition of independent self-construal with social goals, 27 in the condition of independent self-construal without social goals, 23 in the condition of interdependent self-construal with social goals, and 29 in the condition of interdependent self-construal without social goals.

3.2.2. Manipulation check: Internalization

To ascertain further whether the participants had adopted or internalized the social goals as manipulated, they were asked to indicate how much they agreed with the statement that they worked to get a good English result for themselves, and how much they agreed with the statement that they worked for their English teacher. A Self-Construal × Social Goals ANOVA indicated that there were no significant effects on the participants' agreeing that they worked for themselves (all *p*s > .05, all η^2s < .10) (*M* = 4.72, *SD* = 1.64). However, there was a significant Self-Construal × Social Goals interaction on their agreeing that they worked for their English teacher, $F(1, 102) = 4.74$, $p = .03$, $\eta^2 = .04$. Figure 2 presents participants' levels of agreement that they worked for their teacher in the four conditions. Of the participants who were primed with interdependent self-construal, those with social goals (*M* = 5.78, *SD* = 1.20) showed a higher agreement with the statement that they worked for their teacher than those without social goals (*M* = 3.86, *SD* = 1.64), $t(50) = 4.69$, $p < .001$, *Cohen's d* = 1.31. However, for the participants who were primed with independent self-construal, there was no significant difference in the agreement with the statement that they worked for their teacher between those with social goals (*M* = 4.50, *SD* = 1.77) and those without social goals (*M* = 3.88, *SD* = 1.40), $t(52) = 1.41$, $p = .17$, *Cohen's d* = .39. Given that the purpose of the task was to assess their teacher's teaching quality, only those who were primed with interdependent self-construal showed strong agreement with the statement that they worked for their teacher. Those who were primed with independent self-construal did not appear to want to work for the teacher even when social goals were manipulated.

3.2.3. Manipulation check: Self-construal

To check whether the participants in all the conditions agreed with the positions espoused by the articles that primed their self-construal, we performed a Self-Construal × Social Goals ANOVA on their agreement with the articles. There was

no significant interaction effect on participants' agreement with the articles (p = .051, η^2 = .04). Participants in all conditions agreed strongly with the arguments presented by the articles (M = 5.72, SD = 1.32). Further checks were performed by looking into the participants' performance on the Chinese task and their perception of the passage. A Self-Construal × Social Goals ANOVA indicated that there were no significant effects on the participants' performance on the fill-in-the-blanks items (all ps > .05, all η^2s < .10) and their perceived ability to understand the passage (all ps > .05, all η^2s < .10). Participants in all conditions performed very well on the fill-in-the-blanks items (M = 9.91, SD = .32) and rated the passage as easy to understand (M = 6.01, SD = 1.24). The manipulation for self-construal was thus successful.

3.2.4. Manipulation check: Failure experience in the English task

A Self-Construal × Social Goals ANOVA indicated that there were no significant effects on participants' performances on the English task (all ps > .05, all η^2s < .10) or their levels of satisfaction with their performances (all ps > .05, all η^2s < .10). Participants in all conditions performed poorly on the task (M = 3.18, SD = 1.68) and were dissatisfied with their performances (M = 2.62, SD = 1.22). Hence, the manipulation of failure experience was successful.

3.2.5. Behavioral outcome: Course choice

Participants were asked to join either Course A or Course B after their failure experience. Those who chose Course A were willing to improve after failure, while those who chose Course B demonstrated avoidance behavior after failure. As course choice was a dichotomous outcome variable, logistic regression analysis was conducted (Jaccard, 2001). Self-construal, social goals, and self-construal × social goals interaction were entered into the model simultaneously. The model was significant with X^2 (3, N = 107) = 12.83, p = .01. Negelkerke R^2 indicated that the factors accounted for 15.7% of the variance in course choice. Results indicated a

significant self-construal × social goals interaction on course choice, B = -2.718, X^2 (1, N = 107) = 7.23, p = .01. For the participants who were primed with independent self-construal, social goals prompted a lower tendency to choose Course A (B = -1.01). Those with social goals (46.43%, 13 out of 28) were less likely to choose Course A than those without social goals (70.37%, 19 out of 27). This result provided support for Hypothesis 1. This response pattern was reversed for the participants who were primed with interdependent self-construal. Social goals prompted a higher tendency to choose Course A (B = 1.71). Those with social goals (91.30%, 21 out of 23) were more likely to choose Course A than those without social goals (65.52%, 19 out of 29). This result provided support for Hypothesis 2.

3.2.6. Check for confounding variables

A Self-Construal × Social Goals ANOVA indicated there were no significant effects on participants' relationships with their English teachers (M = 4.30, SD = .98) (all ps > .05, all η^2 s < .10), self-efficacy in learning English (M = 4.45, SD = 1.08) (all ps > .05, all η^2 s < .10), mastery goals (M = 5.67, SD = .91) (all ps > .05, all η^2 s < .10), performance goals (M = 3.78, SD = 1.33) (all ps > .05, all η^2 s < .10) and social goals (M = 4.15, SD = 1.18) (all ps > .05, all η^2 s < .10).

3.3. Discussion

The results of Study 2 demonstrated the expected interaction between self-construal and social goals on course choice after failure. As expected, participants who were primed with independent self-construal and social goals were more likely to choose a course that avoided their poor performance being known to others when compared to those who were primed with independent self-construal but no social goals. The response pattern was just the opposite for participants who were primed with interdependent self-construal. Those with social goals were more likely to choose a course that promoted improvement when compared to those without social

goals. Participants' responses to the internalization measure provide further insights into the underlying mechanism of the different effects of social goals under different self-construal conditions.

In this experiment, when social goals were manipulated, all participants, regardless of the self-construal manipulation, reported accurately that the alleged purpose of the English task was to assess the teaching quality of their teacher. However, when asked how much they agreed that they worked to get a good result for their English teacher, participants in the interdependent self-construal condition strongly agreed that they would like to strive for a good result for their teacher, while participants in the independent self-construal condition were not eager to do so.

Such an interesting finding seems to imply that working to gain the social approval of the teacher was still an ego-involved goal for independent participants. Participants in this group clearly understood that their performance in the English task would affect their teacher's assessment. However, their main concern was still their own performance rather than their teacher's assessment. In order to protect their egos after failure, they chose a course that would conceal their poor performance from others at the expense of the opportunity for improvement.

For the participants who were primed with interdependent self-construal, working for the social approval of their teacher meant more than the demonstration of ability. Interdependent participants agreed strongly that they worked for their teacher, implying that internalization might have taken place. The participants who were primed with interdependent self-construal might have considered the teacher's achievement as part of their obligation. In order to help their teacher achieve higher assessment results, they chose a course that facilitated learning even though they might lose face. Working for the social approval of the teacher was no longer an extrinsic behavior but an internally regulated behavior, leading to high learning

motivation.

With the inclusion of the internalization measure, this experiment was able to identify the underlying mechanism that accounts for the different effects of social goals under different self-construal conditions. This is an important contribution to the existing body of knowledge about social goals.

4. General discussion

The present research looked into an uncharted area in achievement goal theory as it investigated the interaction effect of self-construal and social goals on achievement motivation. The moderating role of self-construal received consistent support, either when self-construal was measured (Study 1) or when it was manipulated situationally (Study 2).

Study 1 was an investigation of how social goals predicted self-reported avoidance behaviors, using self-construal as the moderator. The results indicated different prediction patterns of social goals for people with different self-construals. Specifically, social goals predicted low report of avoidance behaviors for people with high interdependent or low independent self-construal and predicted high report of self-handicapping behaviors for people with low interdependent self-construal. The different causal effects of social goals were confirmed in Study 2, in which both self-construal and social goals were manipulated. Under the manipulation of interdependent self-construal, working for the social approval of teacher led students to choose a course that facilitated learning even though they might lose face. Under the manipulation of independent self-construal, working for the social approval of teacher led students to choose a course that would protect their faces even though they might lose the learning opportunity. This experiment extended the findings of Study 1 by including an internalization measure and uncovering a mechanism underlying the different effects of social goals in different self-construal conditions.

The findings of the two studies are convergent. They offer empirical support that social goals should be investigated with reference to self-construal. As indicated by the results of the two studies, combining social goals and performance goals in a single construct might mask the true nature of the social goal, especially for students with interdependent self-construal. These students are usually concerned with their connectedness and relationships with others. Their concern with gaining social approval or meeting social expectations may imply an internalization of values espoused by authority figures, leading to a more intrinsic form of goal and thus low avoidance behaviors and high willingness to improve after failure. By contrast, students with independent self-construal view achievement as personal accomplishment for their own sake. Thus, if they study for the social approval of authority figures, it may imply demonstration of ability, leading to high avoidance behaviors and low willingness to improve after failure.

Nevertheless, whether internalization can promote mastery orientation depends on the values of authority figures. Some teachers may endorse performance goals strongly and encourage social comparison among students. Similarly, some parents are also performance-oriented. They induce competition among their children, or encourage their children to use superficial learning strategies, such as drilling and memorizing, without learning the materials thoroughly. In these cases, students may internalize the performance goals espoused by authority figures and thus adopt performance goals accordingly. It seems that social goals can only represent a more intrinsic form of goal if two conditions are fulfilled concurrently: 1) internalization has taken place; 2) the identified authority figures value learning. The lack of either condition will leave social goals as extrinsic orientation.

The exploration of the meaning of goals is not new in research on achievement motivation. Tao and Hong (2000), using a meaning system approach, argued that it is

important to find out how the meanings of academic achievement vary across cultures. Maehr and Nicholls (1980) also agreed that it is essential to understand the meaning of the self and how the meanings of goals are different across cultures in order to have a proper understanding of student achievement motivation. Achievement motivation should be conceptualized along with its meaning for people rather than being defined in terms of overt behavior. However, the prevailing theories of achievement motivation have mostly been developed in Western cultures and they may not adequately capture Asian students' orientations toward achievement. The genuine picture of achievement motivation may have been distorted if motivation is simply compared in different cultures along the single dimension developed in Western cultures.

The present research examined the role of self-construal within Chinese culture with relatively small sample size. For a more comprehensive understanding of social goals, this research should be replicated in other cultures so as to confirm the generalizability of the findings. More importantly, future research should examine social goals between cultures to investigate whether the predictions of social goals are different for people from the East and West, as was shown for people with different self-construals in the present research. Conducting research in this way can determine how cultural difference of self-construal as well as individual differences of self-construal within culture would moderate the impacts of social goals. Conducting cross-cultural research is, therefore, an important future research direction, which will enhance our knowledge of social goals, including their meanings, functions, and predictions concerning motivation outcomes. Previous cross-cultural studies have examined the motivational profiles of different cultural groups in terms of achievement goal theory but they rarely considered self-construal in the investigation (e.g., McInerney, Hinkley, Dowson, & Van Etten, 1998; McInerney, Roche,

McInerney, & Marsh, 1997).

The present research limited its focus on the approach dimension of social goals. Future research may incorporate approach-avoidance distinction within social goals and investigate how seeking social approval and avoiding social disapproval from authority figures predict behavioral outcomes. Although behavioral measure was included in Study 2, all the measures in Study 1 were self-reported. Future research may incorporate more actual behaviors such as academic achievement as outcome variables. In addition, future research may broaden the range of outcomes from student behavior to emotion. According to self-discrepancy theory (Higgins, 1987), people will be vulnerable to *dejection-related emotion*s (e.g., disappointment, frustration, depression) if personal ideals or wishes have not been fulfilled, while people will experience *agitation-related emotions* (e.g., guilt, self-contempt, anxiety) if there is a feeling of violation of moral standards. The Western literature has reported performance goals to be associated with dejected emotions (Dweck & Leggett, 1988). If social goals represent a demonstration of ability for people with independent self-construal, social goals should be related to dejected emotions as well. However, if social goals represent a moral obligation for people with interdependent self-construal, failing to achieve these goals should result in agitated emotions, instead of dejected emotions. All these predictions are just speculative. Investigation of the effects of social goals on emotion should be an interesting area for future research.

Trying to succeed academically for the social approval of authority figures is only one of the social reasons for trying to achieve. It will be fascinating to investigate other types of social goals as well, for example, social goals related to peers. The effects of peers are believed to be more complicated than the effects of authority figures. This is because we can assume that most authority figures value academic achievement, and thus, the desire to gain their approval should involve making an

effort to do well academically. However, seeking peers' approval is not necessarily related to positive motivation outcomes. As suggested by Berndt and Keefe (1992), whether it is beneficial or harmful to academic motivation depends on the values of peers from whom approval is sought. If peers value academic achievement, the desire to get along with them may encourage positive learning orientation. Otherwise, if peers devalue achievement, one may need to display poor learning attitudes in order to maintain the relationship with the social group.

5. Conclusions

The present research is a preliminary exploration of the moderators of social goals within the framework of achievement goal theory. There is still a long way to go before a comprehensive understanding of social goals can be attained. The association between social goals and achievement motivation is supposed to be complex because the effects of social goals cannot be understood fully unless the moderators involved are uncovered. As suggested by Pintrich (1991), one of the important concerns about motivational theory is "the theoretical and definitional clarity of constructs" (p. 200). As implied by the present research, it seems misleading if we simply apply the same standard of motivation to all people despite the different conceptions of social goals for people with different self-construals. The genuine picture of student motivation can be captured accurately only when the meanings of achievement goals are grasped properly.

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Table 1

Descriptive Statistics and Bivariate Correlations of Self-Construal, Goal Orientation, and Avoidance Behaviors Measures in Study 1 (N = 134)

Variable	1.	2.	3.	4.	5.	6.	7.
1. Independent self-construal	----						
2. Interdependent self-construal	.36**	----					
3. Mastery goals	.13	.14	----				
4. Performance goals	.19*	-.01	.20*	----			
5. Social goals	.24**	.22*	.23**	.22*	----		
6. Self-handicapping behaviors	.09	-.06	-.14	.30**	.16	----	
7. Avoidance of help seeking	-.20*	-.24**	-.23**	-.07	-.11	.43**	----
Mean	4.29	4.55	3.74	2.39	2.76	2.26	3.10
SD	.64	.65	.70	.68	.68	.90	1.04

Note. ** $p < .01$. * $p < .05$.

Table 2

Hierarchical Regression Analysis for Mastery Goals and Self-Construal Predicting Self-Handicapping Behaviors and Avoidance of Help Seeking (N = 134)

	Self-handicapping behaviors		Avoidance of help seeking	
Predictor	ΔR^2	β	ΔR^2	β
Step 1	.05		.13*	
Independent SC		.17		-.14
Interdependent SC		-.10		-.16
Mastery goals		-.16		-.22*
Step 2	.00		.03	
Independent SC × Mastery goals		-.05		-.05
Interdependent SC × Mastery goals		-.02		-.16
Total R^2	.05		.16	

Note. * $p < .05$.

SC = self-construal

Table 3

Hierarchical Regression Analysis for Performance Goals and Self-Construal Predicting Self-Handicapping Behaviors and Avoidance of Help Seeking (N = 134)

	Self-handicapping behaviors		Avoidance of help seeking	
Predictor	ΔR^2	β	ΔR^2	β
Step 1	.09*		.08*	
Independent SC		.09		-.13
Interdependent SC		-.10		-.20*
Performance goals		.27**		-.06
Step 2	.00		.01	
Independent SC × Performance goals		.03		.05
Interdependent SC × Performance goals		-.01		-.06
Total R^2	.09		.09	

Note. ** $p < .01$. * $p < .05$.

SC = self-construal

.

Table 4

Hierarchical Regression Analysis for Social Goals and Self-Construal Predicting Self-Handicapping Behaviors and Avoidance of Help Seeking (N = 134)

	Self-handicapping behaviors		Avoidance of help seeking	
Predictor	ΔR^2	β	ΔR^2	β
Step 1	.04		.08*	
Independent SC		.13		-.13
Interdependent SC		-.13		-.18
Social goals		.13		-.09
Step 2	.13**		.06*	
Independent SC × Social goals		.17		.23*
Interdependent SC × Social goals		-.39**		-.18
Total R^2	.17		.14	

Note. ** $p < .01$. * $p < .05$.

SC = self-construal

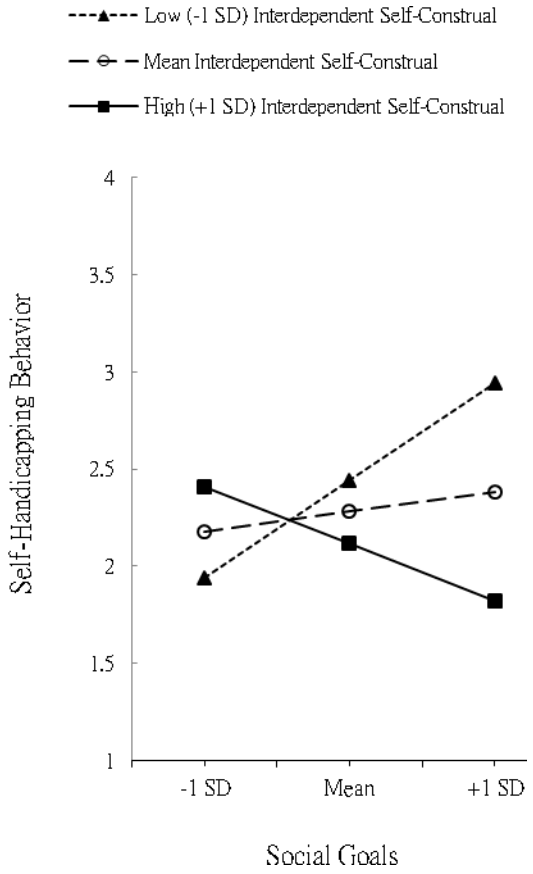

Figure 1a. Interaction of interdependent self-construal and social goals on self-handicapping behaviors in Study 1.

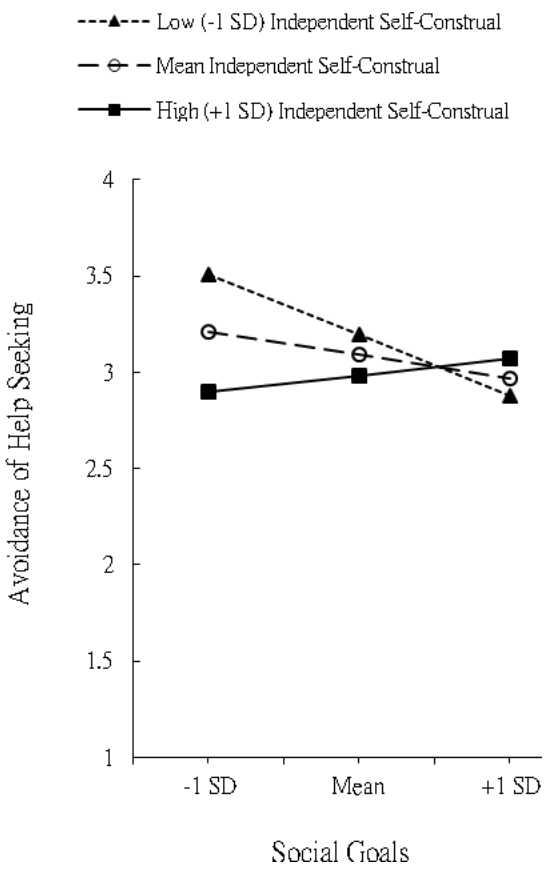

Figure 1b. Interaction of independent self-construal and social goals on avoidance of help seeking in Study 1.

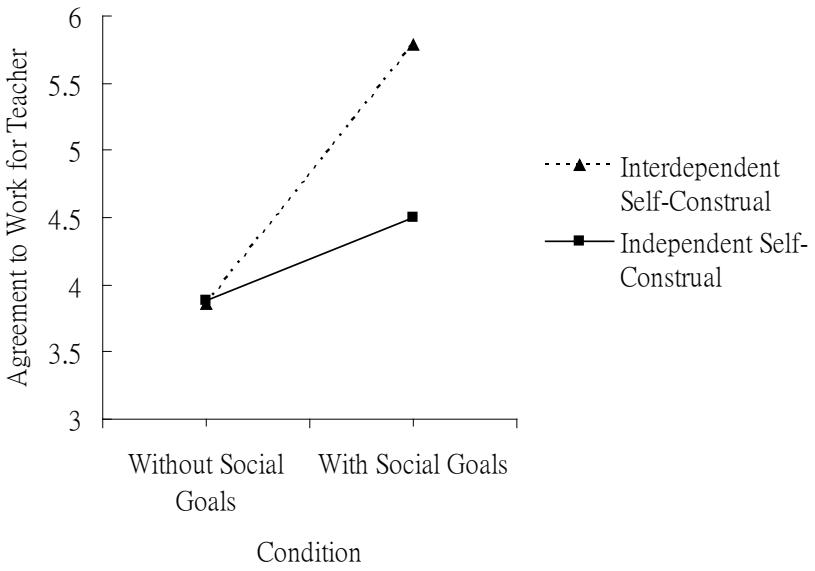

Figure 2. Interaction of self-construal and social goals on students' agreement to work for teacher in Study 2.