Socially oriented achievement goals of Chinese university students in Singapore: Structure and relationships with achievement motives, goals and affective outcomes

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Contemporary literature on culture, self, and motivations (Markus & Kitayama, 1991) suggests that in collectivistic cultures, individual achievement is interdependent of one's social others. We proposed that this cultural characteristic could be exemplified in the achievement goal orientation and tested the notion with university students in a collectivistic community—Singapore. A socially oriented achievement goal construct was developed by taking into consideration the significant social others in the students' lives. A measuring instrument was established with a sample of Singaporean Chinese university students ($N = 196$; 144 females and 52 males); its relationships to achievement motives, goals, and consequences were examined. Although the socially oriented achievement goal items were originally constructed from four categories of social others, confirmatory factor analysis suggested a unifactor structure. Results showed that the socially oriented goal was related positively with students' performance goal, mastery goal, and competitive motive; it bore no relationship to mastery motive, work ethic, and interest in learning; and it predicted negatively future engagement. After the effects of mastery and performance goals were controlled for, the socially oriented goal did not predict test anxiety.

Les écrits contemporains sur la culture, le soi et les motivations (Markus & Kitayama, 1991) suggèrent que, dans les cultures collectivistes, l'accomplissement individuel est interdépendant de l'environnement social de l'individu. Nous avons proposé que cette caractéristique culturelle puisse être présente dans l'orientation de but d'accomplissement. Nous avons testé cette notion auprès d'étudiants universitaires d'une communauté collectiviste—Singapour. Un construct de but d'accomplissement socialement orienté a été développé en prenant en considération les personnes socialement significatives dans la vie des étudiants. Un instrument de mesure a été élaboré avec un échantillon d'étudiants universitaires chinois singapouriens ($N = 196$; 144 femmes et 52 hommes). Ses relations avec les motivations, les buts et les conséquences d'accomplissement furent examinées. En dépit du fait que les items de but d'accomplissement socialement orienté étaient originellement construits à partir de quatre catégories reliées aux autres, une analyse factorielle confirmatoire a suggéré une structure à un seul facteur. Les résultats ont montré que le but socialement orienté était positivement lié au but de performance, au but de maîtrise et à la motivation compétitive des étudiants; il n'a montré aucune relation avec la motivation de maîtrise, l'éthique au travail et l'intérêt pour l'apprentissage; et il a prédit négativement l'engagement futur. Suite au contrôle des effets des buts de maîtrise et de performance, le but socialement orienté n'a pas prédit les résultats au test d'anxiété.

Literatura contemporánea sobre cultura, yo y motivaciones (Markus & Kitayama, 1991) sugiere que en las culturas colectivistas, el logro individual es interdependiente de las personas del medio social. Nosotros proponemos que estas características individuales pueden ser ejemplificadas en la orientación de las metas de logro. Esta propuesta se evaluó en estudiantes universitarios de una comunidad colectivista—Singapur. Se...
Contemporary research literature views student achievement as a multistage process with multiple factors at each stage. With this framework, Dweck and others (e.g., Dweck, 1986; Dweck & Leggett, 1988) delineated a social cognitive model that involves both motivational and social cognitive factors in the process. Culture is the context in which all psychological processes take place; therefore, values, shared goals, and the expectations of the cultural community would provide the framework that defines the meanings and priorities of these achievement-related motives and cognitions (Greenfield, Keller, Fuligni, & Maynard, 2002). It follows that culturally shared meanings and values would guide the construction of achievement goals leading towards culturally valued results. In modern Asian cultures, where both individual achievement and social harmony are highly valued (Chang, Wong, & Koh, 2003), social and achievement motivations might be intimately intertwined in determining observed achievement behaviour. In other words, within the Singaporean Chinese context, individual achievement might serve multiple functions and aim at multiple goals. We also believe that the emphasis on the social purpose of academic achievement might be even more pronounced in the Asian students, as have been found by Tao and Hong (2000) with Hong Kong Chinese students.

Two achievement goals, namely, the mastery or the performance goals, have been delineated in the Western literature (Dweck & Elliot, 1983). If one's aim is to achieve mastery of the task, one adopts a mastery goal orientation; if one's aim is to show others how good one is or to be competitive in the sense of being seen as better than others, one is said to adopt a performance goal orientation. To these goal constructs, we would like to add that in cultural communities where the self is intricately embedded within the social context, there is an added social orientation in one's achievement goals.

Socially oriented achievement goals

Success in the Chinese culture is defined by individual competence evaluated in socially recognized achievements (Chang, Wong, & Teo, 2000). In the school learning process, Stevenson and Lee (1990) found that Chinese and Japanese parents, as well as the teachers, are highly involved in their children learning activities. Congruent with an earlier study by Yu (1974), where the Chinese participants who had high achievement motivation also showed high need for affiliation, Ang and Chang (1997) also found a positive correlation between the need for achievement and the need for affiliation among Singaporeans. The confluence of these studies points to the intricately intertwined social and competence-related motives, cognitions, and motivational processes. From a different line of research, the seminal work by Markus and Kitayama (1991) indicated that the self is a concept intricately embedded within the cultural meaning system. The construal of self, commonly believed to be the anchor of one's world view, would provide meanings to the basic motives and direct the energizing efforts towards either the individually oriented (the independent self-construal) or the socially oriented (the interdependent self-construal) achievement motives.

Yang and Yu (1988) in Taiwan constructed two types of achievement motives, labeled as socially and individually oriented achievement motivations, which were operationally defined by a variety of factors including the motives, the strategies, and the evaluating agent of the individual's achievement effort. We would like to extend this notion and clarify the concept by further...
proposing that this social dimension of achievement is not only evident at the level of basic motives but, more importantly, constitutes an essential part of the goal orientation of Chinese students.

It is proposed that the socially oriented achievement goal is the target that one strives to achieve in order to satisfy social needs (affiliation and comparison). Moreover, the social others to whom the individual's achievement matters would be others who contribute significantly to the individual's meaning of self. Specifically, Chang's (2001) studies on personal relationships and self-construction of young Singaporeans identified parents, teachers, peers, and the community as the "others" who held psychological significance for them. The present study examined the Socially Oriented Achievement Goals (SOAG) measure for use with Chinese Singaporean students and explored how this socially oriented goal was related to basic motives (antecedents), other achievement goals, and achievement outcome (consequence) constructs.

**Antecedents, correlates and outcomes of socially oriented achievement goals**

We proposed that one of the most important antecedences of the socially oriented achievement goal is social comparison. Competitiveness will epitomize the cultural meaning of achievement in most academic settings in Asian schools. Therefore, we hypothesized that the socially oriented achievement goal would be positively associated with competitiveness.

With reference to other achievement goals, we proposed that the socially oriented achievement goal would be positively related to performance goal (e.g., Dweck, 1986) but not to mastery goal. This is because performance is something that can be seen by others, while mastery is a subjective feeling that is not directly observable by others. The latter might result in personal satisfaction but cannot be used as evidence to impress others of one's achievement, especially not to the "evaluating agents" such as teachers, parents and peers (Tao & Hong, 2000).

There is no unanimous consensus in contemporary literature as to how goals may affect specific achievement. The controversy is especially evident as related to evaluative performance outcomes, such as assessment results (Midgley, Kaplan, & Middleton, 2001). However, there is greater consensus over the affective outcomes, with most studies showing that performance goals led to evaluation anxiety, while mastery goals were associated with positive emotions, interests, and future engagement (Midgley et al., 2001). In the present study, we chose affective consequences and future engagement as outcomes to test the potential effects of the socially oriented achievement goals.

**METHOD**

**Participants**

A total of 196 (144 females and 52 males) Chinese undergraduate students enrolled in a major university in Singapore participated in the study for partial fulfilment of a course requirement; their ages ranged from 19 to 26 years ($M = 20.2; SD = 2.16$).

**Instruments**

Achievement motives—attitude toward work. Achievement motives were operationally measured by students' attitude toward work, with items from the Helmreich and Spence (1978) Work and Family Orientation Scale modified by taking into consideration Chinese Singaporean conceptualization of achievement (Chang & Quack, 2003). There were three dimensions, namely, mastery, work ethics, and competitiveness, each of which consisted of six items on a 5-point scale (1 = strongly disagree, 5 = strongly agree). Exemplar items are: "I work harder when I am in competition with others" (competitiveness, $z = .81$), "Once I take on a task, I persist" (work ethics, $z = .87$), and "I find satisfaction in exceeding my past performance even if I do not outperform others" (mastery, $z = .65$).

Socially oriented achievement goals. We constructed eight items (see Appendix A) based on our conceptualization of the construct mentioned earlier. They were on a response format of 1 (strongly disagree) to 6 (strongly agree) ($z = .90$). For each relationship category, two items were written; one denotes approach tendency (e.g., "I study so my teacher will praise me") while the other denotes avoidance tendency (e.g., "I study so my teacher would not think ill of me").

Achievement goals. Elliot and McGregor's (2001) achievement goal questionnaire was used to assess participants' performance and mastery goals, each with three items on a 1 (not at all true
of me) to 7 (very true of me) scale. Exemplary items are: "it is important for me to do better than other students" (performance-approach, \( \alpha = .91 \)), "I just want to avoid doing poorly in this class" (performance-avoidance, \( \alpha = .78 \)), "I worry that I may not learn all that I possibly could in this class" (mastery-avoidance, \( \alpha = .85 \)), and "I want to learn as much as possible in this class" (mastery-approach, \( \alpha = .70 \)).

Outcome measures

Two highly correlated (\( r = .54 \)) items were used to assess participants' academic interest: "I enjoy studying in the university," and "I enjoy studying the course I have taken." One item ("I will take similar courses in the future") was used to assess participants' future engagement, which was strongly correlated with academic interest, \( r = .53 \). These items, all on a 1 (strongly disagree) to 4 (strongly agree) scale were modelled after the intrinsic motivation items used by Elliot and Church (1997). Spielberger's (1977) Test Attitude Inventory (TAI), containing 20 items (e.g., "While taking examinations, I have an uneasy, upset feeling") on 1 (almost never) to 4 (almost always) was used to assess participants' test anxiety (\( \alpha = .90 \)).

RESULTS

Two outliers (0.5%) were deleted. There were no missing data. Evaluation of the assumptions about multivariate normality, linearity, and multicollinearity were satisfactory.

Psychometric properties of instruments

Socially oriented goals. We examined how the four dimensions formed a single factor. Confirmatory factor analysis (CFA) using AMOS 6 was conducted on the four scale scores (each being the sum of the two items in that dimension). Results supported the one-factor model, \( \chi^2 (2) = 3.80, p = .15, \text{GFI} = .99, \text{AGFI} = .95, \text{NFI} = .99, \text{and RMSEA} = .07 \). Thus the four socially oriented goals were treated as a single dimension in subsequent analyses.

Relationships among goals

The three goals are conceptually distinct constructs; however, empirically they were positively correlated among one another (performance and mastery goals, \( r = .51 \); social and mastery goals, \( r = .37 \), and social and performance goals, \( r = .66 \), all \( p<.01 \)). Despite the high correlation between performance and social goals, further confirmatory factor analysis did not support the combination of these two goals into one factor. Thus, the social and performance goals were kept as two separate constructs for subsequent analyses.

Relationships with motives

The socially oriented achievement goal was positively correlated to the competitiveness motive (\( r = .32, p<.01 \)) but bore no relation to work ethics (\( r = .02, n.s. \)) nor the mastery motive (\( r = -.02, n.s. \)).

Relationship with outcomes

A series of multiple regressions was used to explore the relationships between goals and the three outcomes. The three goals were entered simultaneously in a block. For interest, the three goals together explained 5.3% of variance (F = 3.86, \( df = 3, p<.01 \)), whereby only mastery goal made a significant positive contribution (\( \beta = .20, t = 2.76, p<.01 \)) in that students with higher mastery goal had a stronger interest in study. For future engagement, the three goals together contributed 6.3% of the variance (\( R^2 = .06, F = 4.64, df = 3, p<.01 \)), where socially oriented goal contributed negatively (\( \beta = -.22, t = -2.81, p<.01 \)), but both performance and mastery goals contributed positively (\( \beta = .14, .18; t = 1.71, 2.44; p = .09, p<.05 \) for performance and mastery goals respectively). The socially oriented achievement goal actually detracted the student from future engagement while both higher mastery and performance goals enhanced future engagement. The three goals combined explained 18.3% (\( R^2 = .18, df = 3, p<.01 \)) of the test anxiety variance, with only performance goal (\( \beta = .35, t = 4.74, p<.01 \)) contributing significantly. The more the students were performance goal oriented, the stronger their test anxiety.

DISCUSSION AND CONCLUSION

We conceptualized a set of socially oriented goals in Singaporean students' striving for achievement by taking into consideration the different social others to whom one's achievement matters. Strong socially oriented achievement goal was related to
high competitive motive but to neither mastery motive nor work ethics motive. The socially oriented achievement goal was found to be positively correlated with both performance and mastery goals. This network of relationships suggests that the new construct socially oriented achievement goal is indeed an achievement goal but with a social orientation. In terms of consequences of the socially oriented achievement goal when the effects of performance and mastery goals were controlled, the socially oriented goal did not contribute significantly to test anxiety. Given the close correlation between performance and social goals, it is possible that the effect of socially oriented achievement goal on test anxiety is mediated through performance goals. The evaluation anxiety observed in Asian students might only be indirectly attributable to their social orientation. As would have been expected, the socially oriented achievement goal did not predict academic interest. On the other hand, it detracted students from future engagement. This result is highly meaningful in that, if one chooses to engage in a particular task just to meet the expectations of others, one is less likely to have high future engagement.

The positive correlations among socially oriented, performance, and mastery goals suggested that Chinese parents and teachers believed that the prolonged engagement in performance on a task would enhance the intrinsic interest in the task and subsequently help the development of the mastery goal. Future investigation should be directed towards these interrelations among interest, goals, and performance.

Limitations

The sample consisted mostly of female university students. Generalization of the results might be limited to populations of similar educational attainments, different age groups, and different sexes. Future studies should be conducted with populations of different levels of academic attainments, different age groups, and different sexes, to test the scope and boundaries of the socially oriented achievement goal.

REFERENCES


### APPENDIX A

**Socially Oriented Achievement Goals Scale**

1. I study in order to avoid being rejected by my community.
2. I study so my teachers praise me.
3. I study in order to avoid being looked down upon by my peers.
4. I study so my peers would respect me.
5. I study so I will not fail my parents' expectations.
6. I study so my community will be proud of me.
7. I study so my teachers will not think ill of me.
8. I study so my parents will be proud of me.