Chinese University Students' Achievement Goals and Career Decision-Making

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Abstract. If one's career decision represents career goals to a large extent, university study should serve the need to pursue their career in some way, and thus their goal orientations in academic settings would be relevant to their career decisions. This study surveyed 137 Chinese university students' achievement goals and their career decision-making. Results showed that students who reported to be more mastery-approach oriented were more decisive in their career choice, and more knowledgeable about their future career. Students who reported to be more performance-approach oriented did not see the importance of making a career decision. Among the different types of achievement goal orientations, performance-avoidance orientation showed the strongest relationship with career-decision making variables. When male and female students were examined separately, the correlations between achievement goals and career decision making showed different patterns.

1. Introduction

Career decision making has become one important developmental task for young adults nowadays. Making a career decision is a complex process [1]. Individuals need to distinguish between more important and less important decisions, make more effort in the former with adaptive goals, recognize resolution options, and select the one that will achieve desired outcomes [2]. However, many young adults report facing difficulties in making career decisions [3]. Some individuals are labeled as undecided who experience only temporary or developmental career decision-making difficulties, while others are considered as indecisive who suffer from more chronic and pervasive difficulties [4,5,6]. This could be due to the lack of information needed to make a decision, unclear sense of self as to what type of occupations are suitable, no motivation to think it through, no recognition of the importance of career, and so forth [1].

Individuals differ in various aspects of the way they make career decisions [7], and there is considerable inter- and intra-individual variability in the ways they deal with such decisions [8]. [9] identified two complementary dimensions to explain career choice, namely cognitive-personal variables (e.g., self-efficacy, goals) and environmental or contextual features (e.g., parents, friends, society). The current research focuses on the cognitive-personal factors, specifically, achievement goals, to examine their impact on one's career decision-making.

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2. Career decision-making

From a cognitive-behavioral perspective, career decision-making is a problem-solving process when choosing between occupational alternatives [10]. During career decision-making process, career decidedness/indecision has received the most attention which is concerned with the difficulties preventing individuals from making a career decision [11,12]. As a theoretical context for indecision, [1] suggested a taxonomy of career decision-making difficulties, which makes a distinction between difficulties that may occur *before* trying to make a decision (e.g., lack of readiness due to low motivation, general indecisiveness, and dysfunctional beliefs) and those that emerge *during* the process (e.g., lack of information about the process, self, and occupations; inconsistent information due to the unreliable information or internal and external conflicts).

From a cognitive information processing perspective, [13] identified three factors in making career choices: 1) knowledge of self; 2) knowledge of occupations; and 3) the ability to connect self and occupations. He reasoned that individual with these attributes can not only make appropriate choices but also serve the society better by promoting greater efficiency in matching individuals to occupations. This provides an alternative way of thinking about career choice and career development [10].

3. Achievement goal orientation

In terms of cognitive contributions to the process of occupational exploration and commitment, research has examined constructs such as "thinking styles" [14], dysfunctional career thoughts [15,16], and career decision-making self-efficacy [16,17,18]. [19] explored possible sources for difficulties in making career decisions—specifically, the personality and emotional factors that might contribute to it. They suggested three clusters of factors that can hinder career decision making: (a) pessimistic views about the process of decision making, the world of work, and personal control, (b) anxiety about the process, the uncertainty involved, making a choice, and possible outcomes, and (c) self and identity factors associated with generalized anxiety, self-esteem, uncrystallized vocational identity, and interpersonal conflicts. In the last cluster, individuals' perceptions of self also concern the goals or objectives they have.

Achievement goals are conceptualised as the purpose or cognitive-dynamic focus of an individual's competence-relevant engagement [20,21]. Current research on achievement goals centred on four distinct types of goals: mastery-approach goals, performance-approach goals, mastery-avoidance goals, and performance-avoidance goals [22]. In this framework, performance-approach goal oriented individuals strive to demonstrate high ability, and performance-avoidance goal oriented individuals intend to avoid appearing incompetent in front of others. Further, individuals with a mastery-approach goal tend to focus on learning and command of the content or task and individuals with a mastery-avoidance goal tend to avoid not being able to learn as much as they can.

4. Current study

Among a series of internal factors, motivational variables such as self-beliefs and self-efficacy have been implicated in career decision-making. For example, the relationship between cognitive styles and contextual factors was highlighted in the work of [23] who argued that career decision making self-efficacy, internal and external barriers and cognitive style predicted career focus. Another study on gifted girls showed that the perception of self as highly competent would influence effort-making and career choices [24]. Recent work by [25] also suggests that self-efficacy beliefs are indeed powerful contributors to eminent professionals' selection of and success in scientific careers but that gender differences mediate self-efficacy enhancing factors.

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Achievement goals, as another critical personal factor, serve both as a reference point and a motivational factor for making a choice. As [26] argued, individuals' goals act as a reference point and systematically alter the value of outcomes. When values are altered, the cognitive processes that guide their choices are also altered, and thus individuals not only choose differently but also become more motivated to exert effort, persist and perform.

Under the assumption that one's career decision represents career goals to a large extent, and that university students' study should serve the need to pursue their career in some way, their goal orientations in academic settings would be relevant to one's career decisions. Achievement goal theory [22] has delineated different types of goal orientation, which describes students' broad purposes or orientations as reasons for engaging in academic tasks [27]. If the academic tasks are chosen for being facilitators of their career pursuit (e.g., they obtain knowledge and skills relevant to their careers), there are both conceptual and empirical reasons to expect a positive relationship between one's goal orientation and career decisions. Although students' academic goals are expected to be important correlates of their career decision-making, there is a lack of evidence directly testing this proposition. The current study will focus on the how one's achievement goal orientation is relevant to career decision-making.

Gender also seems to be involved in the profile, as girls tend to invest more time and effort in choice tasks [28,29], and (maybe as a consequence) are slower than boys in making their final decision [29,30]. Thus, a further aim of the present study was to compare the differences in the relationship patterns between goals and career decision-making of males and females.

In the current study, attention was focused on the relations between career decisions and achievement goals. Hence, the purpose of this study was to investigate how one's achievement goals affect students' career decision-making processes. We surveyed 137 Chinese university students' achievement goals and their career decision making. Specifically, we hypothesized that;

1) mastery-approach goal orientation would be positively related to career decisiveness;
2) avoidance-goal orientation would be positively related to career indecisiveness;
3) The association between goal orientation and career decision-making would be different across gender.

5. Method

5.1 Participants and procedure

One hundred and thirty-seven freshmen (74.5% male) who were enrolled in the computer programming course offered at a Chinese university participated in this study. They ranged in age from 16 to 20 years (M = 18.65, SD = .85). Participants were provided with a questionnaire package on hardcopies in the middle of the semester. The package contained a demographics questionnaire, Achievement Goal Questionnaire [22] and Career Decision Profile [31]. The researcher briefed the participants about the purpose of this study and assured the confidentiality of their responses and personal information. The questionnaire packages were immediately collected after they were completed. For the present study, all the scales were translated into Chinese, and the back-translation revealed semantically similar items with the original scales.

5.2 Instrument

The 12-item Achievement Goal Questionnaire (AGQ) [22] was adopted to measure students' different types of goal orientations. Participants indicated the perceived appropriateness of each item

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using a Likert scale from 1 (not at all true of me) to 7 (very true of me). Previous analyses of this instrument have reported a clear four-factor structure with each of the achievement goal factors represented by three items showing high internal consistency [22]. Cronbach's alpha values for mastery-approach goals, performance-approach goals, and performance-avoidance goals in the current sample were .63, .67, and .78, respectively. Mastery-avoidance goal subscale was excluded in this study due to its extremely low alpha value.

The 24-item Career Decision Profile (CDP) [31] measured career decision status, with three internally consistent subscales: decidedness, comfort, and reasons. The reasons subscale consisted of lack of self-clarity, lack of occupational–educational information, lack of decisiveness, and lack of career choice importance. A 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree) was used. The CDP has demonstrated reliability and convergent validity [31]. To understand the relationship between one's emotional well-being toward reasons of career decision status, only the lack of self-clarity, lack of occupational–educational information, lack of decisiveness and career choice importance subscales were analyzed in this study. Cronbach's alpha values for lack of self-clarity, lack of occupational–educational information, lack of decisiveness, and career choice importance in the current sample were .47, .49 (with one item removed), .83, and .63, respectively.

6. Results

First, zero-order correlation analyses were conducted for the whole sample. Results were presented in Table 1. Students who reported to be more mastery-approach oriented were more decisive in their career choice, and more knowledgeable about their future career. Students who reported to be more performance-approach oriented did not see the importance of making a career decision. Among the different types of achievement goal orientation, performance-avoidance orientation showed the strongest relationship with career-decision making variables. Specifically, they were not clear about themselves – what they like or what type of life they want to live, they did not have sufficient information on their occupation and required education, they were indecisive in making decisions and they did not consider making such decisions to be important.

Table 1. Descriptive statistics and zero-order correlations among primary variables for the whole sample (N = 137).

	1	2	3	4	5	6	M	SD
1. Mastery-approach goals	-						5.56	1.08
2. Performance-approach goals	.53**	-					5.41	1.03
3. Performance-avoidance goals	.01	.40*	-				4.60	1.76
4. Lack of self-clarity	-.15	.10	.47**	-			4.03	1.24
5. Lack of *occupational-educational information*	-.19*	.05	.41**	.70**	-		4.45	1.16
6. Lack of decisiveness	-.33*	.13	.49**	.78**	.53**	-	3.58	1.39
7. Career choice importance	-.07	-.18*	-.51**	-.53**	-.36**	-.22*	3.49	1.29

* $p < .05$; ** $p < .01$

When male and female students were examined separately (see Table 2 and 3), the correlation patterns between achievement goals and career decision making varied. In particular, the strong correlations between performance-avoidance goals and career decision-making difficulties totally disappeared in female students, whereas the relationship between mastery-approach goals and career decision-making became stronger in females compared to males. In other words, it appears that performance-avoidance orientation operated strongly in accounting for male students' difficulties in making career decisions, while mastery-approach orientation operated strongly for females in its relationship with career decision-making. This finding is important as it highlighted the role of achievement goal orientation in making career decisions, and how it varied across gender.

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Table 2. Descriptive statistics and zero-order correlations among primary variables for males (N = 102)

	1	2	3	4	5	6	M	SD
1. Mastery-approach goals	-						5.60	1.07
2. Performance-approach goals	.50**	-					5.43	.97
3. Performance-avoidance goals	-.04	.44**	-				4.58	1.80
4. Lack of self-clarity	-.05	.17	.61**	-			3.99	1.21
5. Lack of *occupational-educational information*	-.14	.09	.50**	.68**	-		4.56	088
6. Lack of decisiveness	-.31*	.13	.59**	.76**	.50**	-	3.58	1.37
7. Career choice importance	-.12	-.27**	-.56**	-.60**	-.43**	-.22*	3.47	1.34

* $p < .05$; ** $p < .01$

Table 3. Descriptive statistics and zero-order correlations among primary variables for females (N = 35)

	1	2	3	4	5	6	M	SD
1. Mastery-approach goals	-						5.44	1.14
2. Performance-approach goals	.60**	-					5.34	1.19
3. Performance-avoidance goals	.14	.30	-				4.66	1.65
4. Lack of self-clarity	-.40**	-.03	.06	-			4.16	1.31
5. Lack of *occupational-educational information*	-.30	-.02	.17	.73**	-		4.79	099
6. Lack of decisiveness	-.38*	.13	.19	.86**	.61**	-	3.57	1.45
7. Career choice importance	.11	.11	-.34	-.32	-.17	-.20	3.53	1.15

* $p < .05$; ** $p < .01$

7. Discussion and conclusion

Empirical research on career decision-making and achievement goals has been extremely limited, if any. The present study adds to the literature by seeking to clarify whether young adults' goal orientation is associated with their career decision-making. In general, the findings highlighted that career decision-making in Chinese young people was related to their achievement goals, and different types of achievement goals affect the decision-making process differently.

The findings of this study are subject to some limitations. First, self- report instruments were used to measure all the variables. Self-report instruments may be susceptible to social desirability biases, thereby limiting the validity of conclusions that can be drawn with self-reported measures [32]. Related to this is the internal consistency (less than .50) in the subscales of the lack of self-clarity and lack of occupational–educational information subscales, which were lower than desirable and lower than those obtained for the English version. This limits the interpretation of our findings to some extent, but also suggests the need to develop indigenous career scales to further investigate this construct among Chinese people. Third, to avoid carryover from the AGQ to the CDP, the order of these two questionnaires was not counterbalanced, and this could have affected the responses to the CDP. Future research should use a counterbalanced design.

Identifying the unique difficulties that prevent individuals from reaching a career decision is an essential step in providing them with the help they need [1]. In light of these limitations, our findings could be helpful in the design of career interventions. First, career interventions for helping set goals (e.g., mastery-approach goals) might enhance the career decision-making process in terms of a clearer self-knowledge, more access to career-related information, and seeing more value of having a career. Second, there is a need to consider linking academic goals and career goals. Therefore, it is suggested that interventions should provide opportunities to articulate the interconnection between these two, and create effective means to achieve career goals. Third, previous research findings have demonstrated that one's self-efficacy is a better predictor of career decisions than are factors such as preparation, knowledge, competence, or interest [33]. As achievement goal orientation has been found to be strongly linked with self-efficacy [34], a call is made for further research on possible

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factors that mediate the goal-career decision process (such as self-efficacy) and on the implications of academically-related variables for one's career choice.

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