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Comparing Achievement Goal Orientations of Iranian Gifted and Nongifted Schoolchildren

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Abstract: This study was designed to compare achievement goal orientations of gifted and nongifted students. The 512 students in secondary school, including 262 nongifted students and 250 gifted students, responded to the achievement goal questionnaire. Analysis indicated that nongifted students scored significantly higher than gifted students on mastery goal orientation ($F(1, 464) = 30.69, p < 0.0001$). Within groups analysis showed gifted students, as well as nongifted students more significantly use of performance-approach goals than mastery and performance-avoidance goals. Results are discussed with respect to general theoretical implications and context of Iranian educational system.

Key words: Mastery goal orientation, performance approach, achievement

INTRODUCTION

Historically, achievement motivation has drawn considerable attention in educational literature. Recently, a majority of the theoretical and empirical work conducted in the achievement motivation literature has used an achievement goal perspective (Elliot and McGregor, 1999, 2001; Spinath and Stiensmeier-Pelster, 2003; Pajares and Cheong, 2003; Gutman, 2006; Horst *et al.*, 2007; Friedel *et al.*, 2007; Tuominen-Soini *et al.*, 2008; Bipp *et al.*, 2008; Sins *et al.*, 2008). Achievement goals are: relatively stable orientations that students bring to achievement situations (Lehmann, 2002). In general, achievement goals consist of reasons and purposes that students consider for achievement tasks (Gutman, 2006; Sins *et al.*, 2008; Bipp *et al.*, 2008). They are viewed as the cognitive-dynamic focus of competence-relevant behavior (Elliot, 1997; Elliot and Church, 1997). Students with a high learning goal orientation primary want to gain knowledge and skills and thus increase their competencies. Students with a high performance goal orientation want to demonstrate high abilities or want to avoid demonstrating a lack of competence to others (Bipp *et al.*, 2008). An underlying achievement motive of need for achievement or a fear of failure result to individuals select different types of achievement goal (Neumeister and Finch, 2006). These achievement goals to lead a variety pattern of processes and outcomes (Elliot, 1999; Elliot and

McGregor, 2001; Friedel *et al.*, 2007) and drive individuals achievement-related behaviors (Neumeister and Finch, 2006).

Elliot and Church (1997) proposed a trichotomous achievement goal framework consisting of mastery, performance-approach and performance-avoidance goals. A mastery goal focused on the development of new skills, knowledge and competence (Elliot and Church, 1997; Sins *et al.*, 2008). A performance-approach goal directed toward the attainment of favorable judgments of competence and doing better than others (Elliot and Church, 1997; Pajares and Cheong, 2003). A performance-avoidance goal focused on avoiding unfavorable judgments of competence (Elliot and Church, 1997). A need for achievement motive is underline the mastery goals, this motive result to individuals struggle toward success, performance-avoidance goals resulting from fear of failure motive and performance-approach goals are not thought to be driven by a single achievement motive, they can result from either an underlying need for achievement or a fear- of- failure motive (Neumeister, 2004; Neumeister and Finch, 2006; Sins *et al.*, 2008).

Many studies have been showed that goal theories can be important in understanding the achievement motivation of gifted students. Research on goal orientation suggests a complicated interaction between children's perceptions about their ability and their achievement behaviors (Spinath and Stiensmeier-Pelster,

2003). It seems that students' interpretation of their own ability (or intelligence) lead to different achievement goals and task choices in learning situations (Hsueh, 1997; Lehman, 2002; Spinath and Stiensmeier-Pelster, 2003).

The present study by compare achievement goal orientations between gifted and nongifted students in Iran, aimed to examine how students' implicit perceptions of their own intelligence affect their achievement goal orientations (placement the students in gifted schools and nongifted schools result to implicit perceptions about ability or intelligence). In addition, this study examines achievement goal differences within gifted and nongifted groups. This study may promote a better understanding of achievement motivation in gifted and nongifted students and hence, can help educators to design a learning environment to meet the needs of gifted students.

MATERIALS AND METHODS

Participants: The study was carried out in 2007-2008 education year. The gifted group included 250 students (130 girls and 120 boys) randomly Selected from secondary schools for gifted students in Shiraz, Iran. The majority of applicants who are admitted to these schools have previously excelled, receiving awards on the intelligence tests by the National Organization of Gifted and Talented Students. The nongifted group consisted of 262 students (142 girls and 120 boys) randomly selected from 8 secondary schools in Shiraz city. Participants were matched for socioeconomic status. The age range of the respondents was from 11 to 16 years.

Instrument: To measure students' achievement goal orientations The Achievement Goal Questionnaire was used. This questionnaire adapted from Achievement Goal Scale (Elliot and Church, 1997) by Jowkar (2007). The achievement goal questionnaire is made up 20 items with a likert- response format, range from 1-5, with 1 indicating not at all true me and 5 indicating very true of me. A principal axis factor analysis Varimax rotation has been conducted with the Iranian participants' data to confirm the validity of the questionnaire for the Iranian sample (Jowkar, 2007).

The achievement, goal questionnaire assessed mastery goal (6 items), performance-approach goal (7 items) and performance-avoidance goal (7 items). One item in performance-approach goal, for example, is It is important to me do better than the other students. One item in mastery goal, for example, is I want to learn as much as possible from this class. and one item in performance-avoidance goal, for example, is I wish this class was not graded. Reliability of this measure has been assessed Internal consistencies were Cronbach coefficient alpha of 0.77 for performance-approach goal, 0.82 for mastery goal and 0.61 for performance-avoidance goal (Jowkar, 2007). In this study values of Cronbach coefficients alpha for performance-approach goal, mastery goal and performance-avoidance goal were 0.79, 0.72, 0.65, respectively.

RESULTS

Multivariate Analysis of Variance (MANOVA) procedure was conducted to compare gifted and nongifted students in terms of their scores on the achievement goal orientations. A significant effect on all achievement goals combined was observed ($F(3, 462) = 10.47, p < 0.0001$). As shown in Table 1, nongifted students scored significantly higher on mastery goals than gifted students ($F(1, 464) = 30.69, p < 0.0001$). The results did not show any significant differences between two groups on performance-approach and performance-avoidance goals (Table 1).

A repeated measures analysis was conducted to assess achievement goal differences within groups. Results indicated significant differences among achievement goal orientations within gifted (Pillai's Trace = 0.39, $F(2, 228) = 72.83, p < 0.0001$) and nongifted (Pillai's Trace = 0.43, $F(2, 234) = 91.09, p < 0.0001$) groups. Three paired t-tests were conducted to compare differences in scores within each group. Due to multiple comparisons, a Bonferroni inequality ($\alpha/3 = 0.017$) was used to control Type 1 error. Findings showed scores of performance-approach goals were significantly higher than scores of mastery goals and performance-avoidance goals in two groups (Table 2). As shown in Table 2, scores of mastery

Table 1: Comparing achievement goal orientations between gifted and nongifted students

Goal orientations	Mean		SD		N		F-value	Sig.
	Gifted	Nongifted	Gifted	Nongifted	Gifted	Nongifted		
Mastery	23.02	25.00	3.85	3.88	230	236	30.69	0.0001
Performance approach	26.65	27.47	5.37	4.64	230	236	3.061	0.08
Performance avoidance	22.52	22.05	4.96	5.63	230	236	0.899	0.34

Table 2: Comparing achievement goal orientations within gifted and nongifted groups

Pairs	Gifted						Nongifted					
	Mean	SD	N	df	t-value	Sig.	Mean	SD	N	df	t-value	Sig.
Performance-approach	26.7	5.39	238	237	9.58	0.0001	27.38	4.69	245	244	7.90	0.0001
Master	23.02	3.82	238				24.97	3.96	245			
Master	23.04	3.87	238	237	1.19	0.2300	25.07	3.87	243	242	6.18	0.0001
Performance-avoidance	22.47	5.03	238				21.94	5.62	243			
Performance-approach	26.64	5.37	233	232	10.22	0.0001	27.43	4.68	243	242	12.44	0.0001
Performance-avoidance	22.53	4.94	233				21.95	5.67	243			

goals were significantly higher than performance-avoidance goals within nongifted group only ($t = 6.18$, $p < 0.0001$).

DISCUSSION

Results of the current study indicated that nongifted students reported the use of mastery goals significantly more than gifted students. A reasonable interpretation of this finding might be that Iranian gifted students focus on the adequacy of their ability, seeking to demonstrate high ability or avoid a lack of ability rather than development of competence through task mastery. They are worry about how they perform in comparison with their peers as well as what their teachers think of their performance. Thus, their desire to perform well and attain to high grade point and class rank may prevent them from to learn for the sake of learning. Mueller and Dweck (1998) noted that labeling children as gifted or talented represents a form of intelligence praise which may predispose some to adopt performance goals rather than mastery goals (Baldwin and Coleman, 2000). In contrast, nongifted students that focuses on effort and do not worry about judgment of their ability, are oriented towards learning goals, thereby seeking to develop competence and to explore idea.

This research did not show any significant differences between gifted and nongifted students on performance-approach and performance-avoidance goals. In addition, in this research gifted students as well as nongifted students use performance-approach goals at significantly higher rates than master and performance-avoidance goals. These findings would be explained in the competitive context of Iranian educational system. Many researches have in general noted environment conditions have an impact upon the goal orientations that students adopt and the children are sensitive to the specific and potentially different achievement goals emphasized by adults at home and school (Friedel *et al.*, 2007). These studies suggested that performance-approach goals would emerge from environments that emphasize the competition and social comparison (Elliot and McGregor, 2001).

The Iranian educational system is based upon on grades as a major criterion for academic success. Competitive behavior encourage between students by teachers and parents. Especially teachers emphasize outperforming others rather than mastery and learning. It seems, Iranian students prefer performance-approach goals to meet the expectations of their teachers and parents.

The achievement goal orientations differences between gifted and nongifted students in present study suggest that teachers of gifted students should not only emphasize the intelligence and ability of their students but also shown the importance of effort for them. As Dweck and Leggette (1988) state: an entity view of ability often leads to performance goals, thus especially, the teachers of gifted students emphasize on student's effort rather than their intelligence or ability. Because the high use of performance-approach goals by gifted and nongifted students may prevent them from to learn for the sake of learning and task involvement, educators in Iran can provide students with opportunities to work on interest-based tasks. They can evaluate students' progress rather than product. These recommendations encourage students to select mastery goals.

It should be mentioned that more studies are needed to verify the findings of this study. It is recommended that future research consider the interaction of entity and incremental view of ability and achievement goal orientations in gifted students.

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