Pakistan Journal of Psychology, June 2012, 43, 1, 27-40

DIFFERENCES IN ACHIEVEMENT MOTIVATION AND ITS SALIENT COMPONENTS AMONG HIGH AND LOW ACHIEVING STUDENTS

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ABSTRACT

This study examined the differences in achievement motivation and its salient components of high and low achieving students. It was hypothesized that high achieving students would have higher achievement motivation and would also score high on the salient components of achievement motivation than low achieving students. Secondly, there would be significant positive correlation between GPA and the components of achievement motivation. A purposive sample of 187 undergraduate students with the distribution of 126 high and 61 low achieving undergraduate students was drawn from three successive academic sessions. Achievement motivation was measured by Helmreich and Spence (1978) work and family orientation scale. Results indicated that high achieving students have significantly higher achievement motivation than low achieving students. Results also indicated that high achieving students are significantly more competitive and work-oriented as compared to low achieving students. However, no significant differences were found between high and low achievers in terms of mastery orientation and personal unconcern. Correlation analysis indicated a significant positive correlation of achievement motivation, competition and work with academic achievement. This study has wider implications for the students, teachers and educationists.

Key Words: Achievement Motivation, High And Low Achievers, Mastery, Competitiveness, Work, Personal Unconcern

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INTRODUCTION

Achievement motivation is one of the many important factors which determine academic proficiency of students. The motive to achieve produces consistent striving for the pursuit of academic goals. It has been observed that extrinsic and intrinsic rewards such as high grades, distinctions, sense of pride and passion for learning influences the achievement motivational level of students in academic settings (Covington, 2000).

The work on achievement motivation can be traced back to Murray (1938), who defined the need for achievement as "the desire or tendency to do things as rapidly and as well as possible. It includes the desire to accomplish something difficult. To master, manipulate and organize physical objects, human beings and ideas. To do this as rapidly and as independently as possible. To overcome obstacles and attain a high standard. To excel one's self. To rival and surpass others. To increase self-regard by the successful exercise of talent" (Murray, 1938, pp.80-81). This definition implies that achievement is a very complex need and involves accomplishing challenging and difficult tasks independently and speedily. In Murray's view an achievement oriented person is an ambitious and a competitive person who indulges in rivalry with the competitors to exceed (Klein, 1982; Houston, 1985). Murray's definition of achievement motive truly depicts the picture of achievement motivational styles of the high achieving students, as in academic evaluative situations they compete, excel and surpass other competitors.

McClelland (1985) on the other hand, defined achievement motive as, "to do something better not to gain approval or any other kind of external reward but for its own sake" (pp. 228). McClelland's definition highlights the intrinsic aspects of achievement motivation. It emphasizes that a person is internally motivated to achieve the standards which he has set for himself for attaining the goals which in turn gives him a sense of contentment and he does not rely on extrinsic incentives provided by the achievement situations. While in Murray's view an achievement oriented person is competitive and strives to outperform others. McClelland (1985) achievement motivation thus completely rules out the role of extrinsic incentives which motivate students in academic settings. It emphasizes on the intrinsic desire for learning. It has been observed that students are not only spurred by their internal standards such as acquiring the mastery of the subject, but at the same time extrinsic incentives such as roll of honor,

medals, merit certificates and scholarships for the pursuance of higher studies act as motivating forces for the students to excel in academic endeavors.

A classic approach of achievement motivation by Atkinson (1964) presents a different view of achievement motivation. His expectancy value theory revolves around the idea that level of achievement motivation is dependent on how much individuals value their goals and their perceived estimation of attaining those goals successfully. Achievement behavior is the result of the interaction of two motives –"motive to achieve success" and "motive to avoid failure". "Motive to achieve success" is associated with the high achievers and "motive to avoid failure" is associated with the low achievers. Motive to succeed will be eminent in high achieving students, as sense of achievements have been associated with positive emotions such as experiencing pride at one's glorious success whereas motive to avoid failure is high in low achievers as achievement situations have always produced negative emotions such as shame as a result of their poor academic performance (Houston, 1985; Sorrentino & Higgins, 1986).

A recent approach build on the theory of Atkinson's (1964) achievement motivation is "Trichotomous approach-avoidance goal approach" which emphasizes normative and task competency (Elliot, 1997). This trichotomous hierarchical model of approach avoidance achievement goal frame proposes three achievement goals. A mastery goal emphasizes on task competence, performance approach goal focuses on the normative competence and performance avoidance goal focuses on the avoidance of normative incompetence. According to this model, mastery and performance approach goals are considered as approach orientations because they represent task and normative competence positive outcomes (Elliot, 1997; Elliot & Harackietwiz, 1996).

Elliot and Harackiewicz (1996) experimental studies indicated that mastery goal adoption facilitates the intrinsic motivation of the students whereas performance approach orientation yields higher grades. Similarly, Elliot and Church (1997) study indicated that mastery goals promote intrinsic motivation and performance goals encourage rigorous and persistent study behavior. Mastery and performance approach orientation are positively related with graded performance. Seifert (2004) reported that students who pursue mastery oriented tasks are self-governing and believe that effort leads to success. They are more interested in learning and mastering challenging tasks. Students pursuing performance goals are preoccupied with ability concerns. They are concerned about how they perform in relation to others and how others perceive them.

Students are strongly motivated to perform well as they are more interested in getting a favorable judgment of competence.

Previous studies have indicated achievement motivation as a strong predictor of academic achievement (Eppler & Harju,1997; Robbins, Lauver, Le Davis, Langely & Carlstorm, 2004). Similarly, Enwistle (1987) theoretical review of achievement motivation also highlights that motive to achieve reflects the intensity of hard work to achieve the academic goals.

It has been observed that high achieving students indulge in academic competitions and are performance oriented. High achievers perceive the incentive value of the academic assessments which gives them a sense of pride and accomplishment of future goals. Many studies have been carried out in past to measure the differences in the achievement motivation of high and low achieving students; however studies appraising the role of the components of achievement motivation in determining the levels of achievement motivation in students with reference to our indigenous culture is scarce. The present study therefore attempts to identify the salient components of achievement motivation - mastery, competitiveness, work, personal unconcern which not only differentiates between the achievement motivations of high and low achieving students but also determines their achievement motivational styles. The study also compares the high and low achieving students in terms of their overall achievement motivation.

Keeping in view the previous literature it was hypothesized that: 1- High achieving students would have higher achievement motivation than low achieving students. 2- High achieving students would score high on mastery, competitiveness, work orientation and personal unconcern components of achievement motivation than the low achieving students. 3- Academic achievement would be significantly positively associated with achievement motivation and its components.

METHOD

Participants

Sample consisting of 187 B.Sc final year students with a classification of 126 high achievers and 61 low achievers was drawn from three successive academic sessions on the basis of their availability and willingness to participate

in the research. The age of high and low academic achievers ranged from 18-21 years with a mean age of 20 years. The GPA of high achievers ranged from 3.2 to 3.7 with a mean GPA of 3.4. The GPA of low achievers ranged from 1.40 – 2.2 with a mean GPA of 1.82. Sample was drawn from one institution to avoid variability in the evaluation criterion.

Table 1
The Distribution of the Sample

Academic Sessions	2002-2003	2003-2004	2004-2005	Total
High Achievers	36	47	43	126
Low Achievers	26	13	22	61
Total	62	60	65	187

Measures

Work and family orientation (WOFO) questionnaire:
The first part of the questionnaire was used to measure the achievement motivation of high and low academic achievers. The work and family orientation questionnaire (WOFO) was developed by Helmreich and Spence (1978). It is a 32-item questionnaire which measures achievement motivation and attitudes toward family and career. It consists of two parts. The first part measures achievement motivation and it consists of 23 items. These items measure the achievement motives. It consists of four sub-scales-- *mastery, competition, work and personal unconcern*. The mastery component measures preference for difficult and intellectually challenging tasks. The competitiveness component evaluates the desire to succeed in competitive interpersonal situations. The work component assesses an effort and hard work orientation of the students. The personal unconcern measures lack of concern regarding the negative reactions of others towards one's personal achievement. A high score on the personal unconcern indicates a lack of concern about the negative reactions of others to one's personal achievement. The responses are recorded on five-point scale. Strongly agree=4, slightly agree=3, neither agree nor disagree=2, slightly disagree=1, strongly disagree=0. Items 1, 5, 6, 8,11and 17 are reversed scored. Items 1,4,6,10,12,13,16,22 measure mastery orientations and include items like, "If I am not good at something I would rather keep struggling to master it than move on to something I may be good at" and, "I prefer to work in situations that require a high level of skill". Items 3, 7, 15, 21, 23 measure competitiveness including statements like, "I enjoy working in situations involving competition

with others", and "it is important to me to perform better than others on a task". Items 2, 9, 14, 18, 19, 20 measure work orientation and include, "I like to work hard" and, "I find satisfaction in exceeding my previous performance even if I don't outperform others." Items 5, 8, 11, 17 measures personal unconcern, and include statements like, "I worry because my success may cause others to dislike me", and "I avoid discussing my accomplishments because other people might be jealous".

The alpha co-efficient for the above four subscales were .61, .66, .76, and .50 for undergraduate men and .62, .63, .72 and .50 for women respectively (Helmreich & Spence, 1978). Similar alpha coefficient across gender indicated no difference in motivational systems of men and women. The alpha reliability of the scale for our sample was .50.

Procedure

Sample was drawn from the high and low achieving students of B.Sc Hons final year students of three successive academic sessions from an educational institution. Students were classified as high and low academic achievers on the basis of the GPA obtained in their previous annual examinations. High achievers (GPA 3.2-3.7) were those students who were one standard deviation above the mean (GPA 2.7) whereas low achievers (GPA 1.4-2.2) were those students who were one standard deviation below the mean with reference to their normative group. WOFO was administered to high and low achieving students and were asked to read the instructions carefully, and encircle options of their choice on the scale items. After data collection subscales scores and combined composite scores were computed and analyzed.

RESULTS

To compare the high and low achieving students in terms of achievement motivation and its components, t-test for independent samples was used.

Table 2

Comparison of High (n=126) and Low (n=61) Academic Achievers on Achievement Motivation and its Components

Achievement motivation and subscales	***High achievers n =126***		***Low achievers n =61***		
	M	***SD***	***M***	***SD***	***t***
Mastery	19.97	3.96	19.11	3.49	1.43^{ns}
Competition	16.17	2.77	15.11	2.64	2.46*
Work	20.39	2.63	19.14	2.64	3.04**
Personal unconcern	8.63	3.25	8.00	3.04	1.27^{ns}
Achievement motivation	65.17	6.86	61.37	7.56	3.42**

*df =185. *p < .05.**p <.001.*

The table shows that high achievers (M = 65.17, SD = 6.86) significantly have higher achievement motivation than low achievers (M = 61.37, SD = 7.56) at $t(185) = 3.42$, p<.001.The table also shows t-test analysis applied to the four subscales. High and low achieving students do not differ significantly in terms of mastery and personal unconcern. However, high achievers (M = 16.17, SD = 2.77) are significantly more competitive to low achievers (M = 15.11, SD = 2.64) at $t(185) = 2.46$, $p<.05$. Secondly, high achievers (M = 20.39, SD = 2.63) are also significantly more work oriented as compared to low achievers (M = 19.14, SD = 2.64), at t (185) =3.04, $p<.001$.

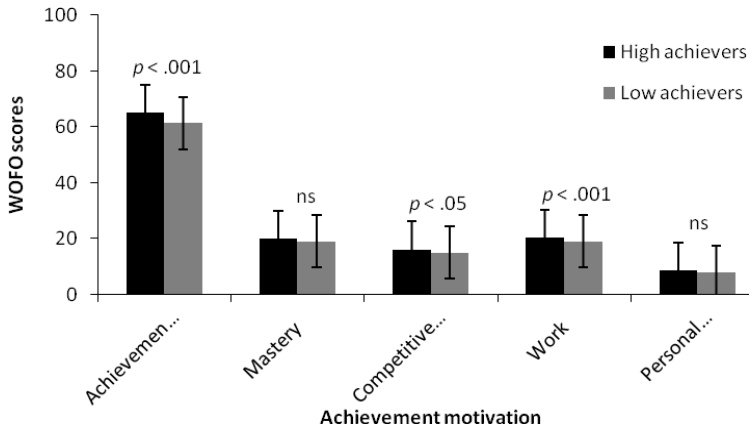


Figure1. High and low achievers differ significantly in terms of achievement motivation and also in terms of competitiveness and work components of achievement motivation.

Table 3
Relationship of Grade point Average (GPA) with Achievement Motivation and its Components

	Achievement Motivation	**Mastery**	**Competitiveness**	**Work**	**Personal Unconcern**
GPA	.273**	.128	.182*	.241**	.109

***p<.001, *p<.05.*

The table shows that GPA has a significant positive relationship with achievement motivation, competitiveness and work orientation.

Table 4
Summary of Simple Linear Regression Analysis indicating achievement motivation as a predictor of GPA

Predictor	B	SE	β
Achievement Motivation	.027	.007	.273**

*R^2 =.074, **p<.001*

The table shows achievement motivation as a strong predictor of GPA. The achievement motivation explains 7% variation in GPA. Beta value indicates that achievement motivation has 27% relative influence on GPA.

Table 5
Summary of Step wise Regression Analysis indicating work orientation –the component of achievement motivation as a predictor of GPA

Predictor	B	SE	β
Work orientation	.066	.019	.241**

*R^2 =.06, **p<.001*

The table shows work orientation as a significant predictor of GPA. The work motivation explains 6% variation in GPA. Beta value indicates that work orientation has 24% relative influence on GPA.

DISCUSSION

The findings showed that high academic achievers have significantly higher achievement motivation as compared to low academic achievers. These results strongly support Atkinson's (1964) classic approach which stresses that level of achievement motivation is dependent on how much we value the goal and our estimation of achieving the goal successfully. It can be inferred from the results that high achievers are highly motivated to achieve success and value academic goals which give them a sense of accomplishment and a sense of pride and they also perceive high possibility of success in academic evaluative situations. From the findings it can be concluded that high achieving students are strongly motivated by the desire to excel, surpass others and compete to meet the internal standards such as mastery of the subject, intrinsic satisfaction, pride and external standards like high course grades, distinctions and honors.

Secondly, findings indicated no significant differences in the mastery orientation of high and low achieving students. Findings indicated that both high and low achieving have mastery orientation approach towards learning. In case of high achievers we can say that they are interested in achieving competence in their learning courses at one hand and on the other hand, their high score on the competitiveness component of achievement motivation indicates their performance goal orientation and their desire to be perceived competent in relation to others. The findings of the study strongly support the Elliot (1994) trichotomous model of approach avoidance goals which states that a mastery and performance orientation yields higher grades. On the other hand, low academic achievers also have a mastery learning approach but their lack of hard work persistently keeps their performance low. This finding also indicates that both high and low achieving students value task competence.

Thirdly, findings indicated that high achievers are significantly more competitive as compared to low achievers. This shows that high achievers have a strong desire to compete and win in academic situations. Competitiveness is an important aspect of achievement motivation in academic settings. High scores on competitiveness also show that high achievers prefer to work in situations involving competition with others. On the basis of our findings we can say that high achieving students are more concerned about their relative position in a normative group. High achievers compete to outperform others. High achievers are more likely to compete to win extrinsic rewards such as good grades, distinctions and honors and are also intrinsically motivated to achieve task competence. We can say that hope for success and the anticipation of pride at winning or prevailing over others encourage high achieving students to strive to meet intrinsic and extrinsic standards of excellence.

We can say that our high achieving students adopt performance goal orientation as they want to prove that they are more competent and would always like to be favorably evaluated by significant others whereas for low achieving students where do they stand in reference to normative group is less significant .

The findings support Elliot and Church (1997) study in case of high achieving students which indicated that mastery goals promote intrinsic motivation and performance approach goal orientation yields higher grades. Keeping in view the findings we can say that our high achieving students are more performance oriented than mastery oriented as this approach ensures them high grades in academic settings and favorable evaluations by the significant

others. On the other hand, low achievers past performances never evoke a desire to compete but compels them to strive enough to get through academic situations. Our evaluation system might be responsible for our high achieving students ego involved performance oriented approach as we judge their mastery at subjects by their grades and the learning task are taught and presented as a test in the context of competition.

Fourthly, findings regarding hard work orientation indicated that high achievers are more hard working than the low academic achievers. From the findings it can be assumed that high achievers work hard to perform their best and better than their past performance. It can be inferred from the analysis that high achievers are fully aware that academic performance is influenced by the degree of effort they expend in learning.

Lastly, findings indicated no significant differences between high and low achievers on the personal unconcern –lack of concern about the negative consequences of others towards one's success. This shows that both high and low achievers more or less hold a similar attitude towards rivalry, negative reactions of others towards one's achievement**.** The low mean scores on this component indicates that they believe that students react negatively at other's success. It indicates that in our educational system the excelling students have to face the negative competition and rivalry from their class mates. The low achievers hold the same type of attitude and believe in negative consequences of one's success. It has been observed that competitors indulge in unhealthy comparisons by comparing their answer scripts and ask teachers for justification of the grades awarded to the other competitors. Such type of comparisons among the students not only promotes unhealthy competition but also erodes the desire of learning for its own sake.

The components of achievement motivation such as mastery orientation, hard work, and desire to compete indicate the tendency to approach success. High scores on these components indicate that high achievers are high in their motive to achieve success.

The findings drive us to think about the factors responsible for the low motivation of low achieving students. It arise a question in our mind that whether low academic achievers have ever set standards to achieve the academic goals. It seems that low academic achievers are less tended to set academic goals or set very low goals such as passing examination marginally which never motivates

them to work hard. They have a desire to master task but their less hard work constantly keeps them low in relation to their normative group. On the other hand, findings have indicated that high achievers are hard working and competitive. They set academic goals which give them a sense of personal accomplishment.

The findings have also indicated the significant positive correlation between GPA and the achievement motivation. Correlational analysis has also indicated a significant positive correlation between GPA and competitiveness and work component of achievement motivation. Findings have also shown achievement motivation and work orientation as the strongest predictor of GPA.

The findings have shown striking differences between the western approaches for promoting achievement behavior and our educational system. Humanistic approaches of motivation discourage competition among the classmates as they feel this can further lower motivation and self-esteem of the low achieving students (Crowl, Kaminsky & Podell, 1997). Competition involves social comparison which can be a motivator for the high achieving students to maintain their positions and perform better than others. We can say that Pakistani performance learning oriented educational culture is responsible for making high achieving students hard working and competitive with a strong desire to surpass others. It has been observed that mostly classroom learning orientation structure is also performance oriented. It has also been observed that Pakistani parents and teachers assess a student's performance in relation to his normative group. Therefore for Pakistani high achieving students academic normative competence is more important than the academic mastery competence as it aggrandize their status.

Conclusions

The study has identified that hard work and competitiveness are the salient components of achievement motivation, which differentiates between the achievement motivation levels of high and low achieving students. The desire to compete and hard work are the two key factors which enables the high achieving students to excel in their academic endeavors. The study has shown achievement motivation and its component work orientation as a strong predictor of academic achievement. This study can help teachers, educationists and students to realize the pivotal role of performance approach orientation based on competitiveness

and hard work in determining the academic normative competence of the students.

Limitations and Suggestions

The study examined the achievement motivation of high and low achieving students. Average achievers were not included in the sample. The study does not address the relationship between future goals and achievement motivation of the students. The future studies should investigate the achievement motivation with regard to the future goals of the students. Future studies should also assess the role of teaching styles in determining the achievement motivational styles of the students. The study also draws the attention of the teachers and educationists towards the need to promote mastery learning orientation among the students as it stimulates the desire of learning for its own sake and makes the student confident in disseminating their knowledge pragmatically in the world outside the classroom.

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