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Relationship between Achievement Goals and Academic Achievement of Undergraduate Students

Dr. Mahvish Fatima Kashif[1], Nimra Rana[2] & Dr. Rabia Tabassum[3]

[1]*Assistant Professor, Faculty of Education, Lahore College for Women University, Lahore,*
Email: Mahvish.fatima@lcwu.edu.pk
[2]*MS Scholar, Department of STEM Education, Lahore College for Women University, Lahore,*
Email: nimrarana748@gmail.com
[3]*Lecturer, Faculty of Education, Lahore College for Women University, Lahore,*
Email: Rgreat786@yahoo.com, rabia786@lcwu.edu.pk

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Corresponding Author:
Dr. Rabia Tabassum
Email:
Rgreat786@yahoo.com, rabia786@lcwu.edu.pk

ABSTRACT

The objective of this study was to find out relationship between achievement goals and academic achievement of undergraduate students. Correlational research was selected as research design. The population of the study was university students of public and private universities of Lahore. The total population was 2333 students from public (1654) and private (679) institutions made up the total population that was computed. From the calculated population the determined sample size was 467 (public: 331, private:136). The stratified proportional random sample method was employed for this purpose. Data was collected using a questionnaire as the tool. The survey technique was used to complete the questionnaire by the respondents. The questionnaire had three parts. The first portion was related to filling the demographic information. The demographic area included the name of institute, nature of institute (public or private), gender (male or female), age, year/semester of study and CGPA. The second portion consisted of 10 items from the Rosenberg Self-Esteem Scale (1965) and the third portion consisted of 12 items from the Achievement Goal Questionnaire (AGQ-R).

Introduction

The target of this study was to scrutinize the affiliation among undergraduate students' achievement goals and academic achievement. A multitude of factors impacts academic achievement among undergraduate students with achievement goals having a significant effect on academic results. While cognitive capacity is sometimes seen as a man predictor of success, it may not completely define the variances in academic achievement found among students.

This research explains how goals influence academic achievement of students. Goals play a crucial role in motivation. They can be defined as a cognitive representation of aspirations that a person is eager to pursue or ignore. While, achievement goals are a type of goals that has drawn a lot of attention in the educational industry during the last two decades (Senko, Hulleman, Harackiewicz, 2011).

The correlation uniting academic achievement and achievement goals has traditionally been the point of attention for research inquires, the fact that both elements are seen to be essential for predicting undergraduate students successful academic break and competent choices. Achievement goal is a fundamental psychological trait that affects student's motivation, conduct and academic achievement.

According to achievement goals theory, these are those objectives in which an individual's primary goal is competence. Achievement goals in simple words are define as 'a forward-thinking cognitive depiction that lead the way to a proficient end state that the individual is focused to either approach or avoid. The main target of achievement goal theory is to elaborate and acknowledge the aim people plump for while dealing with academic activities, as well as the rationality for their choices (Kaplan & Maehr, 2007).

Academic achievement is measured by test results or outcomes, this research has used CGPA of students for this purpose. It is seen as an important predictor for student's success and growth academically among undergraduate students. However, academic success is cannot be completely associated with intellectual capabilities; motivational factors, as it has been witnessed that students with apparently same interests and time of understanding gets different results particularly achievement goals, have a significant influence on students' academic outcomes and experiences (Elliot & McGregor, 2001).

Conversely, Murayama and Elliot (2010) states that students in any academic activity have to select any one of two major types of achievement goals mastery goals (to acquire and attain the task) and the second one is performance goals (strive to prove themselves superior than others). Researchers who are in favor of achievement goals presume that students who willingly adopts mastery goals and those who choose performance goals particularly have different view about gaining and loosing.

According to Hulleman and Senko (2010) individuals with mastery goals view their abilities as a malleable quality which enhances by practice, hard work, perseverance, and ongoing skill development, on the other hand students who are inclined towards performance goals see their talent or abilities as a fixed trait that cannot be improved. Mastery goals students differentiate between success and failure on the base of self-referential criteria such as their belief that they have learned or mastered what was needed, whereas students with performance goals define success as outperforming their peers.

Resilience and adaptive methods of coping are essential in the ruthless and constantly stressful world of higher education, and they are facilitated by strong self-esteem. additionally, by boosting intrinsic motivation and encouraging mastery-oriented learning practices, it affects student's achievement objectives (Deci & Ryan,2000).

Elliot and McGregor (2001), concept of achievement goal explains that it is crucial to comprehend human motivation and performance in the fields of education. It explains the reasons behind individual pursuits of competence and success in achievement settings. Achievement goal theory efficiently portrays that people concisely choose between performance goals, which strive to perform better than others and mastery goals which focuses on training and self-enhancement, each achievement orientation is further segregated into two kinds approach and avoidance

dimensions, depending on whether individuals are motivated by striving for success or avoiding failure.

Statement of the problem

Academic achievement is an essential measure of a student's success in higher education impacting not just academic advancement but also employment opportunities and personal growth. Even while undergraduate students have similar access to educational materials and institutional assistance, their academic achievement frequently varies greatly (Tinto, 2012). Achievement goals comprise mastery goals and performance goals both impacts academic habits and results. Mastery goals are often associated with adaptive learning approaches and increased academic achievement, whereas performance goals might result in stress and maladaptive behaviors (Dweck & McGregor, 2001).

Hence, the reason of this present study was to carefully examined the link between academic achievement and achievement goals in undergraduate students. Filling this deficit will help us understand the motivational and psychological processes that improve academic achievement as well as suggests individualized student support interventions in higher education (Babbie, 2020).

Objectives

1. To explore the relationship between achievement goals and academic achievement of undergraduate students.

2. To explore the difference between achievement goals of undergraduate students on the basis of year of study.

Hypotheses

H_{o1}: There is no significant relationship between achievement goals and academic achievement of undergraduate students.

H_{o2}: There is no significant difference among achievement goals of students on the basis of year of the study.

Literature Review

The drive or motivating factor that students adapt when engaging in academic activities are referred as achievement goals. Learners primarily look for mastery goals, which are focused on improving oneself, or performance goals, put emphasis on demonstrable competence in competition to their opponents, according to the achievement goal theory they can be further divided into avoidance and approach goals (Elliot & McGregor, 2001).

Consequently, the four goals model comprises the following goals: Performance-approach goals (PAG), mastery-avoidance goals (MAVG), mastery-approach goals (MAG) and performance-avoidance goals (PAVG).

Everyone has got some goals to achieve if proper guidance is provided then it can be easier for students to set their goals as well as the road to success. Hence, Locke and Latham (1990) are credited with pioneering goal-setting theory. The explanation of how goals affect behavior is known as goal setting theory. It is the idea that explains how a student's self-esteem determines his academic performance in educational psychology. Learning goals are considered to be a key component affecting how intrinsically motivated a learner is.

Students who select performance goal orientation work to achieve one target which is inclined to perform optimum than all the present fellows, the only motivation is to make others small and leave a mark of superiority in a educational setting their motive is to get high grades. Their view for success is limited for example excelling in an exam or test or learning to perform better than their classmates. As per achievement goal theory, individuals feel motivated for achievement in two ways: performance goal orientation and task goal orientation (Anderman & Midgley, 1997). Conversely according to Elliot (2006), students who have a task goal orientation have an incentive to learn more about the things taught in school and take pleasure in picking up new concepts. Task goal orientation motivates students to engage in cognitive methods to grasp concepts and allows them to take incremental steps as part of larger plans to participate in demanding activities. It emphasizes breaking down larger goals into smaller actionable tasks and systematically working through them to achieve desired outcomes. Students' academic accomplishment is closely connected with both task results-focused and success-oriented goals (Kaplan & Maehr, 2007).

Abraham, Bond and Richardson (2012), states that a common measure of academic achievement is usually relates to academic outcomes like CGPA, test scores, or course performance. As per achievement goal theory, the kind of achievement goals chosen by students strongly influences their motivation, methods of learning, and final performance results (Pintrich, 2000).

Achievement goals are defined as students' personal goals related to their academic aim and reflect how they strive for their academic success. In general terms, performance goals and mastery goals are the two kinds of accomplishment objectives. Further research has identified two subtypes within performance goals: approach (motivational orientations, with approach being drive to move towards something desirable) and avoidance being the drive to move away from something undesirable (Elliot & McGregor, 2001).

Conversely, Dweck (1986) states that mastery goals put focus on the development of a students' ability to fulfill tasks and their mastery of the material, comparatively performance goals concentrate on demonstrating competence in comparison to others.

Many research investigations have been looking at how these goals influence the interdependence among achievement goals and academic achievement. For instance, learners with high ratio of achievement goals are tend to set and meet mastery objectives. Which frequently leads to enhanced academic achievement (Graham & Weiner, 1996).

On the other side, students with poor achievement goals mostly adopt performance goals, which in result help them to rarely fulfill short term targets leaving a void for the motivation to perform well in future, they only work for on scenario situations, avoidance objectives in particular, may negatively influence learning results (Elliot, 1999).

Methodology

The study followed a post-positivist paradigm and was designed on quantitative research. The correlational research method was selected to look into the interrelation allying variables i.e., achievement goals and academic achievement among the undergraduate students.

Population

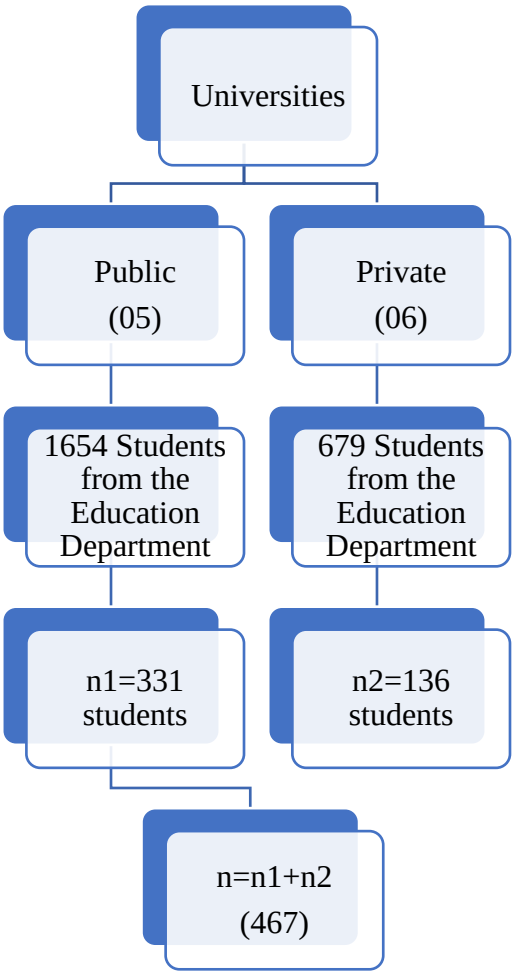
The population of this research was the students of public and private sector educational universities of Lahore which were offering the BS Education program were selected. 11 universities altogether were selected as accessible population. It was twenty percent of the total universities of Lahore. Out of these 11 universities five public universities and six private

university were used. 20% of the total university students from both sectors were selected for research.

Sampling

From all the selected universities of Lahore further 20% of the total population of under graduate students were selected. The total population was 2333, thus the calculated sample size was 467.The students who were studying education, science education and STEM education were included for this research.

Figure I



Instruments

Data from participants was gathered using an AGQ-R achievement goal questionnaire, whom details are given below. Additionally, their year of study and other demographic data were gathered. Other than this for measuring academic achievement, specifically CGPA of students were used which was taken from the data collected through online google forms.

Achievement goal questionnaire-revised scale

The achievement goal questionnaire-revised which is basically the part of Elliot and McGregor's (2001) 2x2 achievement goal substructure, separates the desire goals into four classifications according to their definition's competence (mastery vs performance) and valence (approach vs avoidance). These consist of performance approach, performance avoidance.

Reliability

Table 1: ***Factors of Achievement Goal Scale (AGQ-R)***

Sr. No.	Factors	Cronbach's Alpha	No. of Items
1	Mastery approach goals	0.85	3
2	Mastery avoidance goals	0.93	3
3	Performance approach goals	0.83	3
4	Performance avoidance goals	0.82	3

The reliability of the AGQ-R scale is presented in the above-mentioned table. The table 2 shows the factor wise reliability of the Achievement Goal Questionnaire scale. As in the table displayed above all the Cronbach's Alpha values are greater than 0.70. That is why they all are considered reliable.

Data Analysis

H_{o1}: There is no significant relationship between achievement goals and academic achievement of undergraduate students.

Table 2: ***Relationship between Achievement Goals and Academic Achievement among Students***

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.793	.629	.626	.20697

Table 2 presents the result of variance in academic achievement (criterion variable) by achievement goals (predictor variable). Here R square 0.629, describes that achievement goals predicts 62.9% variance in academic achievement. Thus, achievement goals measured for mastery-approach goals (MAG), result mastery-avoidance goals (MAVG), performance approach goals (PAG), and performance-avoidance goals produces 62.9% change in academic achievement.

Table 3: ***Results of Multiple Regression Test***

	Model	Sum of squares	df	Mean square	F	Sig
1	Regression	33.576	4	8.394	195.959	.000b
	Residual	19.790	462	.043		
	Total	53.366	466			

a. Dependent Variable: CGPA

b. B. Predictors (Constant), PAVG, MAG, MAVG, PAG

The results of the table describe that it is a good fit of the model it shows p-value .000 < .05 this suggests a strong link among achievement goals and academic performance.

Table 4: ***Results of Multiple Regression Analysis for Coefficients***

Model		Unstandardized B	Coefficients Std.Error	Standardized Coefficients Beta	T	Sig
1	(constant)	1.552	.080		19.495	.000
	MAG	.042	.013	.258	3.348	.001
	MAVG	.062	.014	.342	4.439	.000
	PAG	.080	.015	.424	5.496	.000
	PAVG	-.040	.013	-.220	-3.061	.002

The above table shows the results of predictor variables for criterion variables. Beta values for MAG, MAVG, PAG, all are positive which shows positive correlation except PAVG which is negative and shows a negative correlation with academic achievement. P-vale for MAG is .001 < .05, for MAVG is .000< .05, for PAG is .000< .05 and PAVG is .002< .05. which states that factors significantly predict academic achievement (criterion variable). Interpreting that the hypothesis is rejected.

H_{o2}: There is no significant difference among achievement goals of students on the basis of year of the study.

Table 5: ***Difference in Achievement goals of University Students Based on Year of Study***

Achievement Goals	Sum of Squares	Df	Mean Square	F	Sig
Between Groups	15.683	3	5.228	0.171	0.916
Within Groups	14137.392	463	30.534		
Total	14153.075	466			

The above-mentioned table 5 shows the result of one-way ANOVA to test the hypothesis that there is no significant difference among achievement goals of students on the basis of year of study. The f-statistics between the group is 0.171 and the p-value is 0.916 > 0.05. this shows that there is no significant difference among achievement goals of undergraduate students on the basis of semester/year of study. That means the null hypothesis is not rejected.

The table above mentioned shows the findings of one-way ANOVA to test the hypothesis that there is not a substantial difference in the achievement of student's objectives on the base of their study. The groups f statistic is 0.171, with a p-value of 0.916, which is greater than 0.05. this suggests that the null hypothesis has not been rejected.

Discussion

The results of this research support the statement that there is a positively strong relationship which bonds achievement goals and academic achievement which is previously supported by Murayama and Elliot (2009) his study reinforced these findings by displaying that performance approach goals or results oriented goals had a affirming influence on academic achievement through unwavering-determination and tenacity. Accompanying these domain specific results, a recent study in European university students elaborates the fact, both mastery-approach and performance approach goals were positively and significantly linked to academic outcomes.

According to this study's outcomes, there is no difference in the orientations of students toward achievement goals over academic years of the study. Regardless of the year of study, this suggest that levels of mastery-approach, mastery-avoidance, performance-approach and performance-avoidance goals remain unchanged which findings are fit in with Hall et al. (2015) research showing that goal orientation is relatively constant across time. As an instance, the research examined the relationships between pharmacy students' year of study, gender, academic performance and achievement goals. They explored that although first year students had somehow higher scores on mastery and performance-approach goals, this shows no consistent, statistically significant variation in the overall profiles of performance-driven across years.

Conclusion

Contrary to the initial prediction of the null hypothesis, the research data states a strong positive connection between achievement goals and academic achievement among undergraduate students. This exhibit favor to the greater study literature, including findings of Murayama & Elliot's (2000).

Additionally, the study shows that there is no difference among achievement goals among undergraduate students at different years of study which supports the prior hypothesis, which is consistent with earlier findings by Hall et al, (2015).

Recommendations

Following the results of this research few recommendations can be made to improve student's achievement goals and academic achievements. First, curriculum should be designed in a way that encourages students to adopt mastery-approach goals, assists them to enhance learning, understanding and polishing their personal skills apart from just performing better than others. Most importantly educational institutes should provide training session for faculty members to master effective teaching methods that helps to cultivate supportive and nourishing learning environment.

References

1. Ames, C. (1992). Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology, 84*(3), 261–271. https://doi.org/10.1037/0022-0663.84.3.261
2. Anderman, E. M., & Midgley, C. (1997). Changes in achievement goal orientations, perceived academic competence, and grades across the transition to middle-level schools. *Contemporary Educational Psychology, 22*(3), 269–298. https://doi.org/10.1006/ceps.1996.0926
3. Babbie, E. (2020). The Practice of Social Research (15th ed.). *Cengage Learning*. DOI https://www.scirp.org/reference/referencespapers?referenceid=3920225
4. Bandura, A. (1997*). Self-efficacy: The exercise of control*. New York, NY: W. H. Freeman, 444-446. http://www.des.emory.edu/mfp/BanduraCV.pdf
5. Dweck, C. S. (1986). Motivational processes affecting learning. *American Psychologist, 41*(1), 1040–1048. https://doi.org/10.1037/0003-066X.41.10.1040
6. Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review, 95*(2), 256–273. https://doi.org/10.1037/0033-295X.95.2.256
7. Elliot, A. J., & Church, M. A. (1997). A hierarchical model of approach and avoidance achievement motivation. *Journal of Personality and Social Psychology, 72*(1), 218–232. https://doi.org/10.1037/0022-3514.72.1.218
8. Elliot, A. J., & Harackiewicz, J. M. (1996). *Approach and avoidance achievement goals and intrinsic motivation: A mediational analysis*. *Personality and Social Psychology, 70*(3), 461–475. https://doi.org/10.1037/0022-3514.70.3.461
9. Elliot, A. J., & McGregor, H. A. (2001). *A 2*×2 achievement goal framework. *Journal of Personality and Social Psychology*, *80*(3), 501–519. https://doi.org/10.1037/0022-3514.80.3.501
10. Graham, S., & Weiner, B. (1996). Theories and principles of motivation. In D. C. Berliner & R. C. Calfee (Eds.), Handbook of educational psychology (pp. 63–84*). Macmillan Library Reference USA: Prentice Hall International.* https://psycnet.apa.org/record/1996-98614-003
11. Hall, W. A., Hutton, E., Brant, R. F., & McMillan, D. (2015). A randomized controlled trial of an intervention for infants' behavioral sleep problems. *BMC Pediatrics, 15*, 181. https://doi.org/10.1186/s12887-015-0492-7
12. Kaplan, A., & Maehr, M. L. (2007). The contributions and prospects of goal orientation theory. *Educational Psychology* Review, *19*, 141–184. https://doi.org/10.1007/s10648-006-9012-5

13. King, R. B., & McInerney, D. M. (*2014). Culture and motivation: Self-determination and achievement goals in the Asian context. Educational Psychology, 34*(1), 1–6. DOI:10.1111/bjep.12106
14. Richardson, M., Abraham, C., & Bond, R. (2012). Psychological correlates of university students' academic performance: A systematic review and meta-analysis. *Psychological Bulletin, 138*(2), 353–387. https://doi.org/10.1037/a0026838
15. Schunk, D. H., Pintrich, P. R., & Meece, J. L. (2008*).* Motivation and learning: Theory, research, and applications. *Pearson Education. sciencedirect.com*
16. Senko, C., Hulleman, C. S., & Harackiewicz, J. M. (2011). Achievement goal theory at the crossroads: Old controversies, current challenges, and new directions. *Educational Psychologist, 46*(1), 26–47. https://doi.org/10.1080/00461520.2011.538646
17. Tinto, V. (2012). Completing college: Rethinking institutional action. *University of Chicago Press*. https://doi.org/10.7208/chicago/9780226804545.001.0001
18. Urdan, T., & Mestas, M. (2006). *The goals behind performance goals*. *Educational Psychology*, *98(*2), 354–365. https://doi.org/10.1037/0022-0663.98.2.354