

Generalized Anxiety Disorder and the Academic Motivation of University Students

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Abstract: The current research was conducted to study the relationship between GAD and academic motivation of university students. It was hypothesized that GAD has a negative correlation with academic intrinsic and extrinsic motivation and a positive correlation with academic amotivation. Sixty students were selected from three universities of Lahore. GAD-7 scale and academic motivation scale (GAM) were used for assessment of GAD and academic motivation, respectively. The study revealed that a negative correlation exists between GAD and academic intrinsic motivation ($r=-.093$; $p=.422$) and GAD and academic extrinsic motivation ($r=-.286$; $p=.027$). A negative correlation was found between GAD and academic amotivation ($r=.310$; $p=.016$). The study concluded that students with higher GAD level, show lower academic intrinsic and extrinsic motivation, and higher academic amotivation. It is recommended that government should provide the guidance and counseling services in educational institutes, for students so that they can overcome their psychological and academic issues.

Keywords: GAD, Academic intrinsic motivation, Academic extrinsic motivation, Academic amotivation

I. Introduction

Generalized anxiety disorder shortly known as GAD, is a syndrome of enduring anxiety and worry about many events or feelings that the patient usually recognizes as unnecessary or inappropriate [1]. The diagnostic features of GAD are: excessive anxiety and worry, socially and occupationally impaired functioning, disproportionate occurrence, period and intensity of feared events [2]. GAD can be found in any age group, ethnicity and gender, and the 12-month prevalence for GAD is 0.4% to 3.6% and females are more likely to be affected by GAD, than men [3]. The current prevalence of generalized anxiety disorder is estimated to be approximately 2-3% [4] that makes it a commonly prevailing disorder in population.

Students with GAD show significant impairment in broad academic functioning and self-esteem which is a key factor in motivation. Motivation is defined as an urge or push to carry out a particular action or behavior [5] and academic motivation can be defined as a student's desire concerning academic issues when the student's capability is evaluated against a standard of brilliance and performance [6]. Academic motivation is essential to academic performance and achievements so, motivation along with cognition has been taken one of the most followed inquiry lines in the field of educational psychology [7]. Anxiety is assumed to negatively affect academic intrinsic motivation as; negative emotions are incompatible with enjoyment [8]. Students who are intrinsically motivated complete their tasks with enthusiasm, not for reinforcement, they do it for satisfaction [9].

Extrinsic motivation refers to individual's actions which are controlled by the urge to keep away from penalty or to achieve material rewards, and are accompanied by a sense of coercion [10]. Academic amotivation refers to lack of urge towards academic engagement and achievement [10]. A previous study by Legault, Green-Demers and Pelletier [11] concluded that academic amotivation is negatively correlated with anxiety.

When extrinsic motivation leads to some academic achievement or engagement, this would be relatively of narrow intellectual breadth and superficial [10]. According to a study by Gottfried, et al. [12], adolescents with extremely low academic intrinsic motivation have a history of persistent lower academic competence, low achievement, low classroom functioning, higher academic anxiety, and diminished urge for higher education.

The perception of achievement possibility in a person would influence the need to achieve and a fear of failure. The aspiration to achieve, in some students, overwhelms other factors like; lack of ability, lack of skills, lack of time or lack of experience while in students, who cannot overcome these other factors, the sum of these two forces may result in arousal of negative emotions [9].

The consequences of GAD depend upon the activating nature of the fear, worry and anxiety. These emotions depending upon their nature can seize the accomplishment process and on the other hand, can arouse

strong motivation to survive with the negative events causing them and can build up the extrinsic motivation e.g. task-related anger and anxiety are assumed to activate motivation to beat obstacles [13].

Highly anxious students show its adverse impacts on academic motivation in a way that; they are 10 times more likely to be in bottom students of the class, score lower than their peers on the measures of IQ and achievement tests, show a-motivation in tasks that involve teacher or peer evaluation, more likely to leave education early (49% of anxious adults dropped out, 24% of them indicated school-related anxiety to be a prime reason). These worse academic consequences further lead to extended economic losses for the individuals and the society [14].

Due to the lack of awareness, and poor diagnostic facilities, psychological disorders remain undiagnosed and untreated in Pakistan, leaving the mental health of people more open to disorders, negativities, in turn, causing lack of performance at the part of an individual and on the whole, thus hindering the country's development. This study will help teachers, educational psychologists, and counselors, to understand the problems and obstacles faced by students, which will help leading towards well-motivated youth, performing with their maximum potential towards the greater good of their own and the country.

1.1. Statement of the Problem

The current study was conducted to determine the relationship of generalized anxiety disorder with academic motivation of university students.

1.2. Objectives

- The objectives of the current study were:
- To find out the (GAD) in university students.
- To find out their academic motivation.
- To find out relationship between GAD and the academic motivation of the university students.

1.3. Hypotheses

Following hypotheses were formulated for the study:

- There would likely a significant relationship between GAD and the academic intrinsic motivation of university students.
- There would likely a significant relationship between GAD and the academic extrinsic motivation of university students.
- There would likely a significant relationship between GAD and academic amotivation of university students.

II. Method

This was a co relational research, conducted in two phases. During first phase, a sample of 60 students between the age range of 20-25 years was selected from three universities of Lahore, through random sampling approach, while, during second stage, sample was selected purposefully. Two scales were used for data collection; GAD-7 scale and academic motivation scale (AMS). First, GAD-7 scale was used to assess generalized anxiety disorder. GAD-7 was developed by Dr. Robert L. Spitzer and his colleagues, and permissions for its use for research and clinical purposes were made available. GAD-7 was comprised of 7 items to assess generalized anxiety disorder on a likert scale of 0-3. Minimum possible score on GAD-7 scale was 0 and maximum score was 21. The score must be 8 or more for provisional diagnosis of GAD [15]. Academic motivation scale (AMS) was used to assess the academic motivation of university students. AMS was comprised of 7 sub constructs, of which three sub constructs were of intrinsic academic motivation, three were of extrinsic academic motivation and one sub construct was academic amotivation. AMS included 28 items to assess the academic motivation with the help of a 7 grade likert scale (ranging from: does not correspond at all- correspond completely). Cronbach's alphas for the GAD-7 scale and AMS were .788 and .928, respectively. Students were told about the purpose of research and they were asked to fill consent forms, before administering the scales. First, they were asked to fill the GAD-7 scale to assess their GAD level. Score were calculated by the researcher. Then, students having GAD on a level of 8 or above (moderate level), were requested to move towards the second phase of the research by using purposeful sampling method, and, further, fill the academic motivation scale, for the assessment of academic intrinsic motivation, academic extrinsic motivation and academic amotivation. Data was statistically analyzed through SPSS (v19), and the relationship of generalized anxiety disorder and intrinsic academic motivation, extrinsic academic motivation and academic amotivation of university students was found by Pearson correlation coefficient.

III. Results

Table 1. Descriptive Statistics for GAD, Intrinsic Academic Motivation, Extrinsic academic Motivation, and Academic Amotivation

	M	SD
GAD	11.10	3.16
Intrinsic Motivation	53.00	13.50
Extrinsic Motivation	59.46	14.76
Amotivation	10.43	6.41

Table 1 shows the means and standard deviations (*SD*) for the generalized anxiety disorder (GAD), intrinsic academic motivation, extrinsic academic motivation, and academic amotivation. Extrinsic academic motivation scores are seen to spread far from the mean score, while, anxiety scores are clustered closely around the mean.

Table 2. Split Cell Descriptive Statistics of Gender with Generalized Anxiety Disorder

Gender	N	M	SD
Male	4	10.00	1.63
Female	56	11.23	3.18

Table 2 shows that female respondents presented slightly higher mean score of GAD (11.23) as compared to male respondents (10). The standard deviation of GAD scores is low for male respondents (1.63), which tells that anxiety scores lie closely to the mean score i.e. 11.23, whereas, that of female respondents is higher (3.18), which shows that anxiety score of females spread far from the mean score i.e. 10.

Table 3. Split Cell Descriptive Statistics of Gender with Intrinsic Academic Motivation

Gender	N	M	SD
Male	4	44.75	12.56
Female	56	53.41	13.59

Table 3 indicates the higher score in intrinsic academic motivation for females (53.41), as compared to males (44.75). The standard deviation of intrinsic academic motivation for females is 13.59 and for males, 12.56, which shows that females 'scores lie far from the mean i.e. 53.41 as compared to that of males 'scores, that lie near to their mean i.e. 44.75.

Table 4. Split Cell Descriptive Statistics of Gender with Extrinsic Academic Motivation

Gender	N	M	SD
Male	4	49.5	17.25
Female	56	60.17	14.49

Table 4 shows the mean and standard deviation of extrinsic academic motivation according to gender. Female respondents presented higher (60.17) mean score of extrinsic academic motivation than male respondents who showed a lower mean score of 49.5. The extrinsic academic motivation scores for male respondents spread far from their mean i.e. 49.5, as compared to that for females (M=60.17, SD=14.49).

Table 5. Split Cell Descriptive Statistics of Gender with Academic Amotivation

Gender	N	M	SD
Male	4	8.5	5.45
Female	56	10.57	6.49

Table 5 states that females showed higher mean score (10.57) for academic amotivation as compared to that of males (8.5). Female respondents' scores are spread on a greater distance from their man scores (SD=6.49) than that of males (SD=5.45).

Table 6. Bivariate Correlation of GAD with Academic Intrinsic Motivation, Academic Extrinsic Motivation and Academic Amotivation

	4	3	2	1
1-GAD				1.00
2-Academic intrinsic motivation			1.00	-.093
3-Academic extrinsic motivation		1.00	.707**	-.286*
4-Academic Amotivation	1.00	-.354**	-.197	.310*

Note: ** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Table 6 reveals that GAD and academic intrinsic motivation are negatively correlated, $r = -.093$ while $p = .482$ which is not significant. The correlation between GAD and academic extrinsic motivation is highly significant and negative, $r = -.286$ while $p = .027$ which is significant at 0.05 level. GAD and academic amotivation are highly correlated, $r = .310$ while $p = .016$ which is significant at 0.05 level. This shows that respondents who scored high in GAD-7 scale, had higher scores in academic amotivation and lower scores in academic extrinsic motivation.

IV. Discussion

The findings of the current study revealed that students having higher GAD level, show lower academic intrinsic and extrinsic motivation that proves first and second hypotheses of the study which stated that GAD has a negative correlation with academic intrinsic and extrinsic motivation, respectively. Positive correlation between GAD and academic amotivation is found which proves the third hypothesis of the study.

This study found that students showed that more students have higher academic extrinsic motivation (59.46) than academic intrinsic motivation (53). This finding is supported by a study done by Maurer, Allen, Gatch, et al. [16], which reported that students have higher extrinsic motivation than intrinsic motivation.

The study showed that students' academic extrinsic and intrinsic motivation scores are higher than their academic amotivation scores, which is consistent with the findings of a study by Maurer, Allen, Gatch, et al. [16]. Female students are found to be more intrinsically motivated than males. This finding is supported by previous researches [5]. Higher academic extrinsic motivation shown by females, is consistent with the study results of Brouse et al. [5], but in contradiction with the previous research stating that males are more extrinsically motivated than female.

This study also found that majority of male and female students having GAD had a moderate level of anxiety. These findings were made on the basis of self-report standardized scales filled by the respondents. The findings indicated that females have higher levels of GAD than males, which is consistent with previous researches [17, 18]. The relationship between GAD and academic intrinsic motivation is found to be statistically insignificant but negative which shows that students with higher GAD levels exhibit lower academic intrinsic motivation. This finding is supported by previous researches which stated that anxiety has a negative effect on academic intrinsic motivation [12, 8, 19]. Academic extrinsic motivation is also found to be negatively correlated with GAD and this finding is supported by a study conducted by Bandura & Cervone [13], which additionally stated that relationship of anxiety and academic extrinsic motivation is dependent upon the activating nature of fear, anxiety and worry. The relation between GAD and academic amotivation is revealed to be positive which is consistent with a previous study, according to which academic amotivation is negatively correlated with detrimental consequences i.e. anxiety [11].

V. Conclusion

Previous studies have supported that students' satisfaction is important for their intrinsic academic motivation, while anxiety has a reverse relationship with intrinsic motivation [9]. Moreover, anxiety also shows negative relation with extrinsic academic motivation which hinders students to achieve their academic goals [13].

Psychologists and teachers can play an important role in helping students as it was found that teacher's positive interest, feedback and emotional support enhances students' sense of emotional security, satisfaction and academic intrinsic motivation [10]. The current study was limited to a small sample and this should be considered before generalizing the results.

References

- [1]. Willacy, H. Generalized anxiety disorder. 2013. Retrieved from: <http://www.patient.co.uk/doctor/generalised-anxiety-disorder#>
- [2]. Schultz, J., Gotto, J. G., and Rapaport, M. H. The diagnosis and treatment of generalized anxiety disorder. *Primary Psychiatry*, 12, 2005.
- [3]. American Psychiatric Association. *Diagnostic and statistical manual of mental disorders (5th ed.)* Washington DC: American Psychiatric Association, 2013.
- [4]. Weisberg, R. B. Overview of generalized anxiety disorder: epidemiology, presentation, and course. *Journal of Clinical Psychiatry*, 70(2), 2009.
- [5]. Brouse, C. H., Basch, C. E., LeBlanc, M., McKnight, K. R. and Lei, T. College students' academic motivation: Differences by gender, class, and source of payment. *College quarterly*, 13(1), 2010. Retrieved from: <http://www.collegequarterly.ca/2010-vol13-num01-winter/brouse-basch-leblanc-mcknight-lei.html>
- [6]. DiPerna, J. C., and Elliott, S. N. Development and validation of the Academic Competence Evaluation Scales. *Journal of Psychoeducational Assessment*, 17, 1999.
- [7]. Pajares, F. and Urdan, T. (Eds.). *Academic motivation of adolescents. A volume in the adolescence and ducation series.* [Google Books version]. 2002. Retrieved from: http://books.google.com.pk/books?id=d3ke4bgGCWQC&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false
- [8]. Perkon, R., Goetz, T., Titz, W. and Perry, P. Academic emotions in student's self-regulated learning and achievement: A program of qualitative and quantitative research. *Educational psychologist*, 37(2), 2010.

- [9]. Nusrat, N. (2013). Academic motivation and academic performance in adolescents: a comparative study of four birth orders. (Unpublished master's thesis). Preston University, Islamabad, Pakistan.
- [10]. Assor, A., Kaplan, H., Kanat-Maymon, Y., & Roth, G. (2005). Directly controlling teacher behaviors as predictors of poor motivation and engagement in girls and boys: The role of anger and anxiety. *Learning and instruction*, (15), 2005.
- [11]. Legault, L., Green-Demers, I. and Pelletier, L. Why do high school students lack motivation in the classroom? Toward an understanding of academic amotivation and the role of social support. *Journal of educational psychology*, 98(3), 2006. Retrieved from: http://selfdeterminationtheory.org/SDT/documents/2006_LegaultGreenPelletier_JEP.pdf.
- [12]. Gottfried, A. E., Gottfried, A. W., Morris, P. E., and Cook, C. R. Low academic intrinsic motivation as a risk factor for adverse educational outcomes: A longitudinal study from early childhood through early adulthood. In C. Hudley & A. E. Gottfried (Eds.) *Academic motivation and the culture of schooling in childhood and adolescence*. New York: Oxford University press, Inc, 2008.
- [13]. Bandura, A. and Cervone, D. Self-evaluation and self-efficacy mechanisms governing the motivational effects of goal systems. *Journal of personality and social psychology*, 45, 1983
- [14]. Lyneham, H. The impact of anxiety on student performance. [PowerPoint presentation]. Centre for Emotional Health, Macquarie University. 2009. Retrieved from: Emotional Health Clinic Website: https://www.aisnsw.edu.au/Services/PL/SW/Documents/157496_Heidi_Lyneham_The_Impact_of_Anxiety_on_Student_Performance.pdf
- [15]. Lowe, B., Decker, O., Muller, S., et al. Validation and standardization of the Generalized Anxiety Disorder Screener (GAD-7) in the general population. *Medical care*. 46(3), 2008.
- [16]. Maurer, T., Allen, D., Gatch, D. B., Shankar, P., and Sturges, D. Students' academic motivations in Allied Health classes. *The internet journal of Allied Health Sciences and Practice*, 10(1), 2012.
- [17]. Scott, K. M., Wells, J. E., Angermeyer, M., Brugha, T. S., Bromet, E., Demyttenaere, K., and de Girolamo, G. et al. Gender and the relationship between marital status and first onset of mood, anxiety and substance use disorders. *Psychological medicine*, 40(9). 2010. Retrieved from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2891411/>
- [18]. Mirza, I. and Jerkins, R. Risk factors, prevalence and treatment of anxiety and depressive disorders in Pakistan: A systematic review. *BMJ*, 328(7443), 2004.
- [19]. Rouse, H. L. and Fantuzzo, J. W. Competence motivation in head start: An early childhood link to learning. In C. Hudley and A. E. Gottfield (Eds.). *Academic motivation and the culture of schooling in childhood and adolescence*. New York: Oxford University press, Inc. 2008.