

## **Psychological Adjustment as Predictor of Students Academic Achievement in Gilgit: Pakistan**

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Keeping in view the importance of psychological adjustment in students' academic achievement this research was conducted to assess the predictive power of psychological adjustment for students' academic achievement. A total of 171 (85 male & 86 female) students between the ages of 17-35 years ( $M = 22.08$ ,  $SD = 2.7$ ) were recruited from Karakoram International University, Gilgit, Pakistan. The adult version of Personality Assessment Questionnaire along with the obtained marks in last semester of the students was recorded to assess their academic achievement. Results showed that students' psychological adjustment was significantly related with their academic achievement. Hierarchical regression analysis indicated that only students' negative self-adequacy, a subdomain of psychological adjustment, independently predicted their academic achievement. Additionally, gender differences were also found in emotional instability and academic achievement.

*Keywords:* Psychological adjustment, academic achievement, negative self-adequacy, emotional instability

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Students' academic achievement is an important issue for parents as well as for teachers. Doing well in academics is highly valued among parents, teachers, and in society and the negative impression of poor academic achievement is not easily minimized. Therefore, it attracts researchers' attention in modern world as a result a good number of factors have been found to be related with students' academic achievement including psychological and study skill factors (Steven et al., 2004). Students' social functioning and adjustment, uniquely contribute to students' academic achievement (Chen, Rubin, & Li, 1997). In contrast, disruptive, aggressive, socially withdrawn, and inhibited and shy children tend to perform poorly in academics (Dishion, 1990; Green, Forehand, Beck, & Vosk, 1980; Mastern et al., 1995; Wentzel, 1991). School children who have social and behavioral problems tend to be low achievers or even failed in academics in subsequent years (Coie, Lochman, Terry, & Hyman, 1992; Ledingham & Schwartzman, 1984; Masten et al., 1995; Ollendick, Weist, Borden, & Greene, 1992) and their increased level of stress and depression negatively affects their grade point averages (Buddington, 2002).

According to the findings of structural equation model conducted by Valas (2001) students' academic achievement was directly and indirectly related to their psychological adjustment. Internalizing and externalizing behavioral problems such as withdrawal, somatic complaints, anxiety, depression, delinquent behavior, and aggression have interaction effects on academic achievement (Malinauskiene, Vosylis, & Zukauskiene, 2011). Another variable of psychological adjustment such as aggression is highly studied in association of students' academic achievement. It is believed that aggression is related to the various forms of poor academic outcomes such as lower academic achievement, absenteeism, and lower graduation rates. Aggression has explained 16% of variance in students' academic achievement (Loveland, Lounsbury, Welsh, & Buboltz, 2007). Boys with behavioral difficulties, antisocial behavior, and delinquency have lower academic achievement than those without behavioral difficulties (Hinshaw, 1992; Yousefi, Abu Talib, BteMansor, BteJuhari, & RofRedzuan, 2010). Externalizing behavior problems were

significantly associated with students' academic difficulties and lower gains in test scores and this association was stronger for older students (Arnold, 1997; Georges, Brooks-Gunn, & Malone, 2012).

The comorbidity between students' academic and behavioral challenges with emotional and behavioral disorders is also high that ranged from 25% to 97% (Reid, Gonzalez, Nordness, Trout, & Epstein, 2004). For some researchers and institutions the poor academic achievement of students with emotional and behavioral disorders is not surprising because it is criteria for emotional disturbances (IDEIA, 2004; Mooney, Epstein, Reid, & Nelson, 2003). According to the findings of meta-analysis students with emotional and behavioral disturbances reported significant deficits in their academic achievement. In contrast, academic performance of students without behavioral disorders was significantly better than students with behavioral disorders. The difficulties of students with behavioral problems are not limited to their poor academic performance but they also have reported higher school absence rate (Apkan, Ojinnaka, & Ekanem, 2010).

The association between emotional and behavioral problems with poor academic performance is consistent across gender and different levels of academic career. Students with emotional and behavioral disorders including school adjustment and externalizing and internalizing behaviors from both elementary and secondary levels performed poorly on reading, math, and written expression (Lane, Barton-Arwood, Nelson, & Wehby, 2008). Additionally, both boys and girls with emotional and behavioral disorders as compared to their typical peers, have comparable academic achievement deficits (Nelson, Babyak, Gonzalez, & Benner, 2003; Nelson, Benner, Lane, & Smith, 2004). Thus, students with emotional and behavioral disorders tend to be academically underachievers regardless of their gender and level of academic career.

Some contradictory findings are reported by researchers in Pakistani context i.e., there was a negative relationship between students' psychological adjustment and their academic achievement. It indicated that when students' psychological adjustment increases



their academic achievement decreases (Mahmoodd & Iqbal, 2015; Nazli & Irfan, 2009). According to them the reasons behind these findings are cultural differences because most of the studies that reported positive relationships between both variables were conducted on western samples. In Pakistan, students are not emotionally trained and their parents focus on their academic achievement for the sack of competition.

It is evident from the reviewed literature that students with emotional and behavioral problems tend to have lower academic achievement and attainment but some contradictory evidences are reported from Pakistani context. Keeping in view this point the present research was designed to assess the relationship between students' psychological adjustment and their academic achievement.

### **Hypothesis**

Students' psychological adjustment would predict their academic achievement.

## **Method**

### **Research Design**

A correlational study was designed to assess the relationship between psychological adjustment and academic achievement of university students in Gilgit.

### **Participants**

The sample of 171 (85 male and 86 female) students were recruited from various departments of Karakoram International University, Gilgit city, Pakistan based on convenient sampling technique. Their age ranged from 17-35 years ( $M = 22.08$ ,  $SD = 2.7$ ).

## Measures

**Demographic Information Form;** a self-constructed demographic information form was used to collect participants' personal information like, age, gender, educational level, parents' education and occupation etc.

**Personality Assessment Questionnaire (Child PAQ);** Students responded to the Urdu-version of the Adult PAQ to assess their own psychological adjustment (Rohner & Khaleque, 2005). The questionnaire consists of seven subdomains that are; hostility/aggression, dependency, negative self-esteem, negative self-adequacy, emotional unresponsiveness, emotional instability, and negative world view. The sum of these 7 scales composes the psychological adjustment. The higher the score the higher the psychological maladjustment and low score indicates lower psychological maladjustment. The measure has been found to be reliable for use internationally (Khaleque & Rohner, 2002). In the present study the Cronbach's alpha was .91.

**Academic Achievement;** students obtained marks in the previous semester were used to measure their academic achievement.

## Procedure

Only consented students have responded to the adult personality assessment questionnaire in their class rooms. Their obtained marks in previous semesters were collected from the office of controller of examination, Karakoram International University, Gilgit. The statistical analysis was performed by SPSS (19 version).

## Results

The present study was conducted to assess the relationship between psychological adjustment and academic achievement of university students in Gilgit.

Table 1  
*Mean, Standard Deviation and Gender Differences in Psychological Adjustment, its Subscales, and Academic Achievement*

Measures	Boys (n=85)		Girls (n=86)		t
	M	SD	M	SD	
Personality Assessment Questionnaire	135.7	21.5	135.4	17.7	.09
Hostility/Aggression	19.4	4.6	19.0	7.0	.43
Dependency	23.5	5.9	24.8	4.8	1.6
Negative Self Esteem	18.5	4.8	17.3	4.4	1.7
Negative Self Adequacy	17.1	4.4	16.3	3.6	1.2
Emotional Unresponsiveness	18.9	3.8	18.6	3.4	.5
Emotional Instability	20.6	4.1	22.8	4.4	3.2*
Negative Worldview	17.4	5.9	16.7	5.2	.89
Academic Achievement	65.6	7.2	68.9	6.7	3.03*

\*p<.05

Table 1, shows that female students have higher level of emotional instability as compared to male students while female students outperformed male students in academic achievement. There are no gender differences in psychological adjustment and its subscales; hostility/aggression, dependency, negative self-esteem, negative self-adequacy, emotional unresponsiveness, and negative world view.

Table 2  
*Correlations between Psychological Adjustment and its Subscales and Academic Achievement*

Variables	1	2	3	4	5	6	7	8	9
Psychological adjustment	—								
Hostility/aggression	.52**	—							
Dependency	.41**	.27**	—						
Negative self-esteem	.67**	.21**	-.03	—					
Negative self-adequacy	.73**	.21**	.01	.73**	—				
Emotional unresponsiveness	.57**	.32**	.13	.31**	.34**	—			
Emotional instability	.60**	.30**	.24**	.21**	.31**	.30**	—		
Negative world view	.64**	.24**	-.01	.40**	.46**	.25**	.25**	—	
Academic achievement	-.31**	-.05	-.02	-.27**	-.34**	-.23**	-.09	-.26**	—

\*p<.05, \*\*p<.01

Table 2, shows the correlation between psychological adjustment and academic achievement that is statistically significant. It indicates that whenscores on psychological maladjustment decrease the academic achievement increase. Subdomains of psychological maladjustment that are; negative self-esteem, negative self-adequacy, emotional unresponsiveness, and negative world view are also negatively and significantly correlated with academic achievement while the correlations between academic achievement and other subdomains of psychological maladjustment that are; hostility/aggression, dependency, and emotional instability are not significant.

Table 3

*Hierarchical Regression Analyses Predicting Students 'Academic Achievement*

Predictors		$\beta$	$R^2$	$\Delta R^2$
<b>Step 1</b>				
Constant	82.56		.09	.09
Psychological adjustment		-.31**		
<b>Step 2</b>				
Constant	77.20		.11	.11
Hostility/aggression		.01		
Dependency		-.02		
Negative self-esteem		-.05		
Negative self-adequacy		-.34**		
Emotional unresponsiveness		-.14		
Emotional instability		.007		
Negative world view		-.13		

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

According to results of hierarchical regression analysis as shown in table 3, students' psychological adjustment is a significant predictor of their academic achievement,  $F = 17.8$ ,  $p < .01$ . The correlation coefficient is  $R = .31$ , indicating that it explained 9% variance in students' academic achievement.



The picture is quite different when subdomains of psychological adjustment which are; hostility/aggression, dependency, negative self-esteem, negative self-adequacy, emotional unresponsiveness, emotional instability, and negative world view were used as predictors of students' academic achievement. Specifically, only negative self-adequacy contributed significantly to variations in students' academic achievement,  $F = 21.0$ ,  $p < .01$ . The correlation coefficient is  $R = .34$ , indicating it explained 11% variance in students' academic achievement while other subdomains of psychological adjustment did not predict students' academic achievement.

### Discussion

This study examined the association between students' psychological adjustment and their academic achievement. It was found that students' overall psychological maladjustment scores were negatively and significantly related with their academic achievement as had been predicted. The gender differences in overall psychological adjustment was not significant, however, it was significant in emotional instability and academic achievement. Thus female students reported higher level of emotional instability and academic achievement as compared to male students.

These findings are consistent with earlier investigations reporting that students' adjustment, their emotional health, and social competence in a longitudinal study were significant predictors of their academic achievement even after controlling their IQ level (Teo, Carlson, Mathieu, Egeland, & Sroufe, 1996). Their prosocial classroom behavior was also associated with their better academic outcomes and evidences suggested that students' desirable classroom behavior causes their better academic outcomes (Wentzel, 1993). On the other hand, students' feelings of sadness and hopelessness were related to declines in their test scores in reading, language, and mathematics; however their test scores increased when they have caring relationships and high expectations in school, and meaningful community participation (Hanson, Austin, & Lee-Bayha, 2004). Under-achiever students in



school also revealed deficits in self-esteem and problems in interpersonal relationship (Stone & LaGreca, 1990). All psychological problems which are associated with adjustment can adversely affect students' scholastic achievement (Ameerjeen, 1983; De Bimleshwar & Singh, 1970; Gupta, 1970; Mattoo, 1994; Miya & Krishna, 1996; Orpen, 1976; Sharma & Manju, 1993). Similarly, in the present study, it was found that students' negative self-esteem, negative self-adequacy, emotional unresponsiveness, and negative world view were negatively associated with their academic achievement.

According to Roeser, Eccles, and Strobel (1998), different behavioral and emotional problems effect students' academic functioning differently. For example, internal distress such as sadness, anxiety and depression diminished students' academic functioning directly while externalized distress such as anger, frustration, and fear can cause school difficulties as a result students suffer learning delays and poor achievement. Some researchers have reported direct association between students' externalizing behavior problems and their lower academic achievement and academic skills (Arnold, 1997; Frick et al., 1991; Hinshaw, 1992; McLeod & Kaiser, 2004). In search of the possible reasons of these associations between externalizing behavior problems and academic achievement, researchers have found noncompliant and undercontrolled behaviors of students which directly hamper their learning (Patterson, Reid, & Dishion, 1992).

It is important to understand the role of mediating variables in relationship between psychological adjustment and academic achievement of students. According to Nasir (2012) students' emotional intelligence mediate the relationship between adjustment and academic achievement of students in Pakistan. According to Buhs and Ladd (2001) negative peer treatment leads to less adjustment that in turn is related with less achievement. However, Grolnick and Ryan (1989) reported various dimensions of parenting associated with adjustment and academic achievement of students.

Unfortunately, in Pakistan a research based program to address students emotional and behavioral disorders have not been

identified. Parents value academic achievement but underestimate their emotional training (Mahmoodd&Iqbal, 2015). Such program should include trained and devoted professionals, behavioral management plans, application of environmental support, programs to enhance social skills, academic support system, and family involvement (Simpson, Peterson, & Smith, 2011). Without early and effective interventions, students with emotional and behavioral problems are more likely to be at high risk for poor academic achievement (Jenn, 2007). Such interventions which strengthen students' social, emotional, and decision-making skills positively impact their academic achievement in terms of high standardized test scores and better grades (Fleming et. al., 2004). Thus, enhancing their social and emotional behavior can have a strong positive impact on school success and eventually in life (Zins, Bloodworth, Weissberg, & Walberg, 2004).

### **Conclusion, Limitations, and Recommendations**

As a conclusion of the present research findings and other empirical evidences, students' psychological adjustment is important to define their academic achievement. However, it is not certain about the role of mediating variables in this relationship.

Despite its significance for this less researched area of Pakistan, the present study has some limitations such as: the study was conducted only on university students and the mediating variables in the relationship between psychological adjustment and academic achievement of university student were not controlled.

Therefore, it is recommended to include students from schools and colleges with an inclusion of mediating variables in future research.

### **References**

- Ameerjeen, M. S. (1983). *Personality and academic achievement of schedule caste schedule tribe college students of agricultural science: A comparative study*. (Unpublished Ph.D. Thesis). Bangalore University, India.

- Apkan, M. U., Ojinnaka, N. C., & Ekanem, E. E. (2010). Academic performance of school children with behavioral disorders in Uyo, Nigeria. *African Health Science, 10*(2), 154-159.
- Arnold, D. H. (1997). Co-occurrence of externalizing behavior problems and emergent academic difficulties in young high-risk boys: A preliminary evaluation of patterns and mechanisms. *Journal of Applied Developmental Psychology, 18*, 317-330.
- Buddington, S. A. (2002). Acculturation, psychological adjustment (stress, depression, self-esteem) and the academic achievement of Jamaican immigrant college students. *International Social Work, 45* (4), 447-464.
- Buhs, E. S., & Ladd, G. W. (2001). Peer rejection as antecedent of young children's school adjustment: An examination of mediating processes. *Developmental Psychology, 37*(4), 550-560.
- Chen, X., Rubin, K. H., & Li, D. (1997). Relationship between academic achievement and social adjustment: Evidence from Chinese children. *Developmental Psychology, 33*(3), 518-525.
- Coie, J. D., Lochman, J. E., Terry, R., & Hyman, C. (1992). Predicting early adolescent disorder from childhood aggression and peer rejection. *Journal of Counseling and Clinical Psychology, 60*, 783-792.
- De Bimleshwar., & Singh, R. (1970). Home adjustment as a determinant of academic motivation. *Indian Educational Review, 5*(2), 52-58.
- Dishion, T. J. (1990). The family ecology of boy's peer relations in middle childhood. *ChildDevelopment, 61*, 874-892.
- Fleming, C. B., Haggerty, K. P., Brown, E. C., Catalano, R. F., Harachi, T. W., Mazza, J. J., & Gruman D. H. (2005). Do social and behavioral characteristics targeted by preventive interventions predict standardized test scores and grades? *Journal of School Health, 75*, 342-349.
- Frick, P. J., Kamphaus, R. W., Lahey, B. B., Loeber, R., Christ, M. A. G., Hart, E. L., & Tannenbaum, L. E. (1991). Academic underachievement and the disruptive behavior disorders. *Journal of Consulting and Clinical Psychology, 59*, 289-294.



- Georges, A., Brooks-Gunn, J., & Malone, L. M. (2012). Links between young children's behavior and achievement; the role of social class and classroom composition. *American Behavioral Scientist*, 56(7) 961-990.
- Green, K. D., Forehand, B., Beck, S. J., & Vosk, B. (1980). An assessment of the relationship among measures of children's social competence and children's academic achievement. *Child Development*, 51, 1149-1156.
- Grolnick, W. S., & Ryan, R. M. (1989). Parent styles associated with children's self-regulation and competence in school. *Journal of Educational Psychology*, 81(2), 143-154.
- Gupta, H.G. (1970). A comparative study of the personality characteristics of high and low achievers as related to their academic achievement. *The Rajasthan Board Journal of Education*, 6, 29-35.
- Hanson, T. L., Austin, G., & Lee-Bayha, J. (2004). Ensuring that no child is left behind: How are student health risks and resilience related to the academic progress of schools? San Francisco: WestEd.
- Hinshaw, S. P. (1992). Externalizing behavior problems and academic underachievement in childhood and adolescence: causal relationships and underlying mechanisms. *Psychological Bulletin*, 111(1), 127-155.
- Individuals with Disabilities Education Improvement Act (IDEIA) of 2004, 20 U.S.C. 1400 *et seq.* (2004). Reauthorization of Individuals with Disabilities Act 1990).
- Jenn, D. L. (2007). Academic achievement of students with emotional and behavioral disorders: A review of the research. *Exceptionality Education Canada*, 17(3), 111-136.
- Khaleque, A., & Rohner, R. P. (2002). Perceived parental acceptance-rejection and psychological adjustment: A meta-analysis of cross-cultural and intracultural studies. *Journal of Marriage and the Family*, 64, 54-64.
- Lane, K. L., Barton-Arwood, S. M., Nelson, J. R., & Wehby, J. (2008). Academic performance of students with emotional and behavioral disorders served in a self-contained setting. *Journal of Behavioral Education*, 17(1), 43-62.
- Ledingham, J. E., & Schwartzman, A. E. (1984). A 3-year follow-up of aggressive and withdrawn behavior in



- childhood: Preliminary findings. *Journal of Abnormal Child Psychology*, *12*, 157-168.
- Loveland, J. M., Lounsbury, J. W., Welsh, D., & Buboltz, W. C. (2007). The validity of physical aggression in predicting adolescent academic performance. *British Journal of Educational Psychology*, *77*(1), 167-176.
- Mahmoodd, K., & Iqbal, M. A. (2015). Psychological adjustment and academic achievement among adolescents. *Journal of Education and Practice*, *6*(1), 39-42.
- Malinauskiene, O., Vosylis, R., & Zukauskiene, R. (2011). Longitudinal examination of relationships between problem behaviors and academic achievement in young adolescents. *Procedia Social and Behavioral Sciences*, *15*, 3415-3421.
- Mastern, A., Coatsworth, J. D., Neeemann, L., Gest, S. D., Tellegen, A., & Garnezy, N. (1995). The structure and coherence of competence from childhood through adolescence. *Child Development*, *66*, 1635-1659.
- Mattoo, M. I. (1994). Vocational interests, adjustment problems and scholastic achievement of high and low creative students. *Indian Educational Review*, *29*, 86-88.
- McLeod, J. D., & Kaiser, K. (2004). Childhood emotional and behavioural problems and educational attainment. *American Sociological Review*, *69*, 636-658.
- Miya, I., & Krishna, K. P. (1996). Adjustment problem among socio-Economically deprived adolescents. *Indian Journal of Psychology*, *4*(1), 32-35.
- Mooney, P., Epstein, M. H., Reid, & Nelson, J. R. (2003). Status of and trends in academic intervention in research for students with emotional disturbance. *Remedial and Special Education*, *24*, 273-287.
- Nasir, M. (2012). Emotional intelligence as a mediator in the relationship of cultural adjustment and academic achievement of international students. *Academic Research International*, *3*(3), 275-280.
- Nazli, F., & Irfan, S. (2009). Adjustment and academic performance among adolescents. *Pakistan Journal of Social and Clinical Psychology*, *21*(6), 44-48.

- Nelson, J. R., Babyak, A., Gonzalez, J. E., & Benner, G. H. (2003). An investigation of the characteristics of K-12 students with comorbid emotional disturbance and significant language deficits served in public schools. *Behavioral Disorders, 29*, 25-33.
- Nelson, J. R., Benner, G. J., Lane, K., & Smith, B. W. (2004). An investigation of the academic achievement of K-12 students with emotional and behavioral disorders in public school settings. *Exceptional Children, 71*, 59-73.
- Ollendick, T. H., Weist, M. D., Borden, M. G., & Greene, R. W. (1992). Sociometric status and academic, behavioral, and psychological adjustment: A five-year longitudinal study. *Journal of Counseling and Clinical Psychology, 60*, 80-87.
- Orpen, C. (1976). Personality and academic attainment: A cross-cultural study. *British Journal of Educational Psychology, 46*(2), 220-222.
- Patterson, G. R., Reid, J. B., & Dishion, T. J. (1992). *A social interactional approach: Antisocial boy* (Vol. 4). Eugene, OR: Castalia.
- Reid, R., Gonzalez, J. E., Nordness, P. D., Trout, A., & Epstein, M. H. (2004). A meta-analysis of the academic status of students with emotional/behavioral disturbance. *Journal of Special Education, 8*(3), 130-143.
- Roeser, R. W., Eccles, J. S., & Strobel, K. R. (1998). Linking the study of schooling and mental health: Selected issues and empirical illustrations at the level of the individual. *Educational Psychologist, 33*, 153-176.
- Rohner, R. P., & Khaleque, A. (2005). Personality Assessment Questionnaire (PAQ): Test manual. In R. P. Rohner & A. Khaleque (Eds.), *Handbook for the study of parental acceptance and rejection* (4th ed., pp. 187-226). Storrs, CT: Rohner Research.
- Sharma, M., & Manju, M. (1993). The effect of discordance between interest and chosen curriculum upon psychological adjustment and academic achievement. *Indian Journal of Psychometric and Education, 24*(1), 25-30.

- Simpson, R. L., Peterson, R. L., & Smith, C. R. (2011). Critical educational program components for students with emotional and behavioral disorders: Sciences, policy and practice. *Remedial and Special Education, 32*, 230-242.
- Steven, R. B., Kristy, L., Huy, L., Daniel, D., Ronelle, L., & Aaron, C. (2004). Do Psychosocial and Study Skill Factors Predict College Outcomes? A Meta-Analysis. *Psychological Bulletin, 130*(2), 261-288.
- Stone, W. I., & LaGreca, A. M. (1990). The social status of children with learning disabilities: A re-examination. *Journal of Learning Disabilities, 23*, 32-37.
- Teo, A., Carlson, E., Mathieu, P. J., Egeland, B., & Sroufe, L. A. (1996). A prospective longitudinal study of psychosocial predictors of academic achievement. *Journal of School Psychology, 34*, 285-306.
- Valas, H. (2001). Learned helplessness and psychological adjustment: Effects of age, gender and academic achievement. *Scandinavian Journal of Educational Research, 45*(1), 71-90.
- Wentzel, K. R. (1991). Relations between social competence and academic achievement in early adolescence. *Child Development, 62*, 1066-1078
- Wentzel, K. R. (1993). Does being good make the grade? Social behavior and academic competence in middle school. *Journal of Educational Psychology, 85*, 357-364.
- Yousefi, F., Abu Talib, M., BteMansor, M., BteJuhari, R., & RofRedzuan, M. (2010). The relationship between test-anxiety and academic achievement among Iranian adolescents. *Asian Social Science, 6*(5), 100-105.
- Zins, J. E., Bloodworth, M. R., Weissberg, R. P., & Walberg, H. J. (2004). The scientific base linking social and emotional learning to school success. In J. Zins, R. Weissberg, M. Wang, & H. J. Walberg (Eds.), *Building academic success on social and emotional learning: What does the research say?* (pp. 3-22). NY: Teachers College Press.