

EFFECT OF ADVERSITY QUOTIENT ON ADAPTIVE SKILLS AMONG HIGHER SECONDARY STUDENTS

Mrs. Safna T.¹, Dr. Bindu K.²

¹Research Scholar, Department of Education, Mother Theresa Womens' University, Kodaikkanal, Tamil Nadu.

²Professor & Head, Department of Education, Mother Theresa Womens' University, Kodaikkanal, Tamil Nadu.

Abstract

Students face a variety of academic, emotional, and social obstacles in an increasingly complex learning environment that call for adaptation and adversity in addition to cognitive intelligence. This study investigates the connection between higher secondary students' Adaptive skills and their Adversity Quotient (AQ), a gauge of a person's ability to overcome obstacles. AQ, introduced by Paul G. Stoltz (1997), reflects a person's ability to withstand, adapt to, and recover from difficult situations, which plays a pivotal role in shaping students' adaptive interactions and personal development. The study involved a stratified random sample of 400 Higher secondary students (204 male and 196 female) across various academic streams (Science, Commerce, and Humanities) from both government and private schools. The AQ Profile and a standardized Adaptive skills Scale were administered to assess the relationships between Adaptive skills and Adversity quotient and interpersonal competence. Descriptive and inferential statistics, including t-tests, and correlation analysis, were employed to interpret the data.

Introduction

A person's social and personal growth is greatly influenced by their level of education. Students encounter a variety of social, emotional, and academic obstacles in today's fast-paced environment, which affects their capacity for productive interpersonal interaction. Although IQ and EQ have long been seen to be important factors in success, a relatively recent idea called Adversity quotient (AQ) is attracting interest due to its potential to influence how people react to challenges and failures. According to Paul G. Stoltz (1997), AQ is the capacity to tolerate, adjust to, and overcome hardships. It is frequently thought of as a predictor of personal efficiency and resilience.

Adversity in the context of upper secondary pupils can take many different forms, such as peer competition, familial expectations, academic pressure, and personal concerns. These difficulties put students' social skills to the test, which impacts their adaptive abilities, a crucial component of personality development in general. Communication, teamwork, empathy, conflict resolution, and flexibility are all components of adaptive abilities, which are critical for both professional and personal success. A student who possesses strong adaptive abilities is more likely to form wholesome bonds with others, collaborate with others, and communicate ideas and feelings clearly. Research on the connection between adaptive abilities and Adversity quotient is crucial because it shows how students handle challenges and whether or not their resilience affects their capacity for productive social interaction. Some students with low AQ find it difficult to sustain connections, while others acquire effective coping strategies that

improve their social interactions. Teachers, psychologists, and legislators can create interventions that promote resilience and enhance kids' social competency by having a better understanding of this relationship.

Rationale of the Study

Students' academic achievement is frequently used to evaluate them in the current educational system, but their capacity to cope with stress and hardship is frequently disregarded. But as adolescent mental health issues increase, attention must be paid more and more to non-cognitive abilities like social adaptability and resilience. Success in school and the workplace depends on having adaptive abilities, but not all pupils acquire them at the same rate. Despite their struggles, some kids thrive in teamwork and communication, while others may struggle with adversity and show signs of social isolation, anxiety, or withdrawal. This study is to investigate the "Effect of Adversity quotient on Adaptive skills among Higher Secondary students" in light of this context. By examining how students' ability to handle adversity correlates with their adaptive competence, this research seeks to provide valuable insights into student well-being and holistic development.

Objectives of the Study

1. To assess the level of Adaptive skills among higher secondary students
2. To analyze the relationship between Adaptive skills and Adversity quotient based on Locale

Significance of the Study

The teachers, parents, and legislators will find the study's conclusions useful in comprehending how adversity influences students' adaptive habits. Social-emotional learning (SEL) programs and resilience training can be combined in schools to assist pupils build strong interpersonal skills and high AQ. Additionally, this study will add to the larger conversation on skill-based learning, emotional intelligence, and adolescent mental health. Therefore, by examining the relationship between Adversity quotient and Adaptive skills, this study hopes to support the growth of well-rounded people who can manage life's obstacles while preserving meaningful social relationships.

Methodology

1. Sample Selection

- A sample of 400 higher secondary students selected from various schools.
- The selection was based on stratified random sampling to ensure a representative distribution across four locale groups.

2. Data Collection Tools

- a. **Adaptive skill scale:** Developed by the investigator with the help of research supervisor is used for the study. The scale consists of five components:
 - Conceptual skills
 - Social skills

- Practical skill
 - Occupational skills
 - Emotional and behavioural regulations
- b. Adversity quotient (AQ) Profile:** Developed by the investigator with the help of research supervisor. The scale consists of four components:
- *Control (C)* – Perceived control over adversity
 - *Ownership (O)* – Accountability and proactive behaviour
 - *Reach (R)* – How far adversity affects other areas of life
 - *Endurance (E)* – Perception of how long adversity will last

3. Data Analysis Techniques

- **Descriptive Statistics:** Mean, standard deviation, and percentage were calculated to assess Adaptive skills level.
- **Inferential Statistics:**
 - Independent t-test: To compare Adaptive skills levels between Locale groups
 - Correlation Analysis: To examine the relationships between Adaptive skills and Adversity quotient

Level of Adaptive skills among Higher Secondary Students

To find the level of Adaptive skills among higher secondary students, the test values for the one sample t -test are 138 and 184. The details of the test are presented in table 1.

Table 1

Details of one Sample t-tests for Adaptive skills

Variable	N	Mean	Std. Deviation	Test value	t-value	Level of Significant
Adaptive skills	400	158.50	15.170	138	27.03	0.01
				184	-33.62	0.01

In scale of Adaptive skills, the minimum score obtainable is 46 and maximum is 230. The mean score (158.50) obtained was compared with the middle score on the scale ($46 \times 3 = 138$). The critical ratio obtained is 27.03 which is greater than 2.58, the value required for significance at .01 level (two tailed test). Hence, the higher secondary students have a mean score which is significantly greater than the middle score indicating that higher secondary students' Adaptive skills is above average.

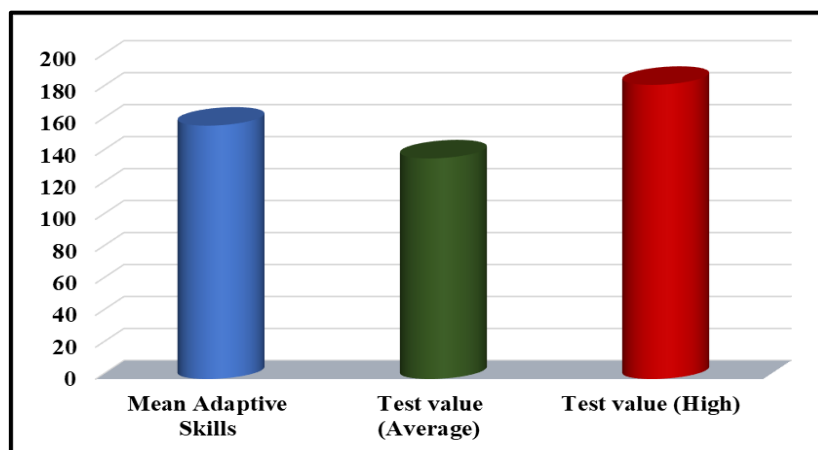
The mean score was again compared with the scale value 184 (46×4 , a high level of Adaptive skills). The critical ratio obtained is -33.62 which is greater than 2.58, the value required for significance at 0.01 level (two tailed test). Hence, the higher secondary students have a mean score which is significantly lesser than the test value (score for high level of Adaptive skills) indicating that higher secondary students' not having a high level of Adaptive

skills. From the pair of one sample t-test, it can be concluded that higher secondary students have above average level of Adaptive skills.

Graphical representation of comparison of mean Adaptive skills with the test values (average and high) is presented in Figure 1

Figure 1

Graphical Representation of Comparison of Mean Adaptive skills with the Test Values (Average and High)



Relationship between Adaptive skills and Adversity quotient among Higher Secondary Students for Total Sample

Data and results of the correlation coefficient for Adaptive skills and Adversity quotient for total sample was calculated and results are presented in table.

Table - 2

Pearson's product moment coefficient of correlation for Adaptive skills and Adversity quotient for total sample

Variable	Mean	Std. Deviation	N	r-value	Level of significance
<i>Adaptive skills</i>	158.50	15.17	400	0.557	0.01
<i>Adversity Quotient</i>	158.16	18.37	400		

From table it is clear that Pearson's product moment coefficient of correlation between Adaptive skills and Adversity quotient for total sample is 0.557 ($P < 0.01$). It means that there is a significant positive correlation between Adaptive skills and Adversity quotient at 0.01 level. There is significant increase in Adaptive skills score for increase in Adversity quotient score. Magnitude of correlation coefficient showed that there exists moderate relationship between Adaptive skills and Adversity Quotient. It can be concluded that there exist a significant positive moderate correlation between Adaptive skills and Adversity quotient for total sample.

Relationship between Adaptive skills and Adversity quotient among Higher Secondary Urban Students

Data and results of the correlation coefficient for Adaptive skills and Adversity quotient for urban higher secondary students was calculated and results are presented in table.

Table 3

Pearson's product moment coefficient of correlation for Adaptive skills and Adversity quotient for Urban Higher Secondary Students

Variable	Mean	Std. Deviation	N	r-value	Level of significance
Adaptive skills	164.20	15.79	138	0.509	0.01
Adversity Quotient	160.93	19.14	138		

From table it is clear that Pearson's product moment coefficient of correlation between Adaptive skills and Adversity quotient for urban higher secondary students is 0.509 ($P < 0.01$). It means that there is a significant positive correlation between Adaptive skills and Adversity quotient at 0.01 level. There is significant increase in Adaptive skills score for increase in Adversity quotient score. Magnitude of correlation coefficient showed that there exists moderate relationship between Adaptive skills and Adversity Quotient. It can be concluded that there exists a significant positive moderate correlation between Adaptive skills and Adversity quotient for higher secondary urban students.

Relationship between Adaptive skills and Adversity quotient among Higher Secondary Rural Students

Data and results of the correlation coefficient for Adaptive skills and Adversity quotient for rural higher secondary students was calculated and results are presented in table.

Table 4

Pearson's product moment coefficient of correlation for Adaptive skills and Adversity quotient for Rural Higher Secondary Students

Variable	Mean	Std. Deviation	N	r-value	Level of significance
Adaptive skills	157.14	14.37	148	0.664	0.01
Adversity Quotient	157.10	16.48	148		

From table it is clear that Pearson's product moment coefficient of correlation between Adaptive skills and Adversity quotient for rural higher secondary students is 0.664 ($P < 0.01$). It means that there is a significant positive correlation between Adaptive skills and Adversity quotient at 0.01 level. There is significant increase in Adaptive skills score for increase in Adversity quotient score. Magnitude of correlation coefficient showed that there exists moderate relationship between Adaptive skills and Adversity Quotient. It can be concluded that there exists a significant positive moderate correlation between Adaptive skills and Adversity quotient for higher secondary urban students.

Relationship between Adaptive skills and Adversity quotient among Higher Secondary Tribal Area Students

Data and results of the correlation coefficient for Adaptive skills and Adversity quotient for tribal area higher secondary students was calculated and results are presented in table.

Table 5

Pearson's product moment coefficient of correlation for Adaptive skills and Adversity quotient for Tribal Area Higher Secondary Students

Variable	Mean	Std. Deviation	N	r-value	Level of significance
Adaptive skills	152.23	11.71	48	0.298	0.05
Adversity Quotient	155.23	18.56	48		

From table it is clear that Pearson's product moment coefficient of correlation between Adaptive skills and Adversity quotient for tribal area higher secondary students is 0.298 ($P < 0.01$). It means that there is a significant positive correlation between Adaptive skills and Adversity quotient at 0.01 level. There is significant increase in Adaptive skills score for increase in Adversity quotient score. Magnitude of correlation coefficient showed that there exists weak relationship between Adaptive skills and Adversity Quotient. It can be concluded that there exist a significant positive weak correlation between Adaptive skills and Adversity quotient for tribal area higher secondary students.

Relationship between Adaptive skills and Adversity quotient among Higher Secondary Coastal Area Students

Data and results of the correlation coefficient for Adaptive skills and Adversity quotient for coastal area higher secondary students was calculated and results are presented in table.

Table 6

Pearson's product moment coefficient of correlation for Adaptive skills and Adversity quotient for Coastal Area Higher Secondary Students

Variable	Mean	Std. Deviation	N	r-value	Level of significance
Adaptive skills	154.20	14.15	66	0.592	0.01
Adversity Quotient	156.83	20.26	66		

From table it is clear that Pearson's product moment coefficient of correlation between Adaptive skills and Adversity quotient for coastal area higher secondary students is 0.592 ($P < 0.01$). It means that there is a significant positive correlation between Adaptive skills and Adversity quotient at 0.01 level. There is significant increase in Adaptive skills score for increase in Adversity quotient score. Magnitude of correlation coefficient showed that there exists moderate relationship between Adaptive skills and Adversity Quotient. It can be concluded that there exists a significant positive moderate correlation between Adaptive skills and Adversity quotient for coastal area higher secondary students.

Hypotheses 1: Higher secondary students possess Average level of Adaptive skills

Finding 1. In scale of Adaptive skills, the minimum score obtainable is 46 and maximum is 230. The mean score (158.50) obtained was compared with the middle score on

the scale ($46 \times 3 = 138$). The critical ratio obtained is 27.03 which is greater than 2.58, the value required for significance at .01 level (two tailed test). Hence, the higher secondary students have a mean score which is significantly greater than the middle score indicating that higher secondary students' Adaptive skills is above average. Hence the hypothesis Higher secondary students possess Average level of Adaptive skills is rejected.

Hypothesis 2: There exists significant relationship between Adaptive skills and Adversity Quotient among Higher secondary students for the total sample

Finding 2. Pearson's product moment coefficient of correlation between Adaptive Skills and Adversity Quotient for total sample is 0.557 ($P < 0.01$). It means that there is a significant positive correlation between Adaptive Skills and Adversity Quotient at 0.01 level. There is significant increase in Adaptive Skills score for increase in Adversity Quotient score. Magnitude of correlation coefficient showed that there exists moderate relationship between Adaptive Skills and Adversity Quotient. It can be concluded that there exists a significant positive moderate correlation between Adaptive Skills and Adversity Quotient for total sample. Hence the hypothesis is accepted.

Hypothesis 3: There exists significant relationship between Adaptive skills and Adversity Quotient among Higher secondary students for the subsamples based on Locale - Rural

Finding 3. Pearson's product moment coefficient of correlation between Adaptive Skills and Adversity Quotient for rural higher secondary students is 0.664 ($P < 0.01$). It means that there is a significant positive correlation between Adaptive Skills and Adversity Quotient at 0.01 level. There is significant increase in Adaptive Skills score for increase in Adversity Quotient score. Magnitude of correlation coefficient showed that there exists moderate relationship between Adaptive Skills and Adversity Quotient. It can be concluded that there exists a significant positive moderate correlation between Adaptive Skills and Adversity Quotient for higher secondary urban students. Hence the hypothesis is accepted.

Hypothesis 4: There exists significant relationship between Adaptive skills and Adversity Quotient among Higher secondary students for the subsamples based on Locale - Urban

Finding 4. Pearson's product moment coefficient of correlation between Adaptive Skills and Adversity Quotient for urban higher secondary students is 0.509 ($P < 0.01$). It means that there is a significant positive correlation between Adaptive Skills and Adversity Quotient at 0.01 level. There is significant increase in Adaptive Skills score for increase in Adversity Quotient score. Magnitude of correlation coefficient showed that there exists moderate relationship between Adaptive Skills and Adversity Quotient. It can be concluded that there exists a significant positive moderate correlation between Adaptive Skills and Adversity Quotient for higher secondary urban students. Hence the hypothesis is accepted.

Hypothesis 5: There exists significant relationship between Adaptive skills and Adversity Quotient among Higher secondary students for the subsamples based on Locale - Coastal

Finding 5. Pearson's product moment coefficient of correlation between Adaptive Skills and Adversity Quotient for coastal area higher secondary students is 0.592 ($P < 0.01$). It means that there is a significant positive correlation between Adaptive Skills and Adversity Quotient at 0.01 level. There is significant increase in Adaptive Skills score for increase in Adversity Quotient score. Magnitude of correlation coefficient showed that there exists moderate relationship between Adaptive Skills and Adversity Quotient. It can be concluded that there exists a significant positive moderate correlation between Adaptive Skills and Adversity Quotient for coastal area higher secondary students. Hence the hypothesis is accepted.

Hypothesis 6: There exists significant relationship between Adaptive skills and Adversity Quotient among Higher secondary students for the subsamples based on Locale - Tribal

Finding 6. Pearson's product moment coefficient of correlation between Adaptive Skills and Adversity Quotient for tribal area higher secondary students is 0.298 ($P < 0.01$). It means that there is a significant positive correlation between Adaptive Skills and Adversity Quotient at 0.01 level. There is significant increase in Adaptive Skills score for increase in Adversity Quotient score. Magnitude of correlation coefficient showed that there exists weak relationship between Adaptive Skills and Adversity Quotient. It can be concluded that there exists a significant positive weak correlation between Adaptive Skills and Adversity Quotient for tribal area higher secondary students. Hence the hypothesis is accepted.

Conclusion

- The findings reveal that most of the higher secondary students have above average level of Adaptive skills.
- A significant positive moderate correlation exists between Adaptive Skills and Adversity Quotient for total sample.
- The study reveals that there exists a significant positive moderate correlation between Adaptive Skills and Adversity Quotient for higher secondary urban students.
- The findings also concluded that there exists a significant positive moderate correlation between Adaptive Skills and Adversity Quotient for coastal area higher secondary students.
- The study also reveals that there exists a positive weak correlation between Adaptive Skills and Adversity Quotient for tribal area higher secondary students.
- A significant positive association exists between Adversity quotient and Adaptive skills.

Reference

1. Huijuan, Z. (2009). The Adversity Quotient and academic performance among college students at St. Joseph College, Quezon city [Unpublished Bachelor's Thesis]. Retrieved from https://www.peaklearning.com/wp-content/uploads/2019/05/PEAK_GRI_huijuan.pdf

2. Hema, G., & Gupta, S. M. (2015). Adversity quotient for prospective higher education. The International Journal of Indian Psychology, 2(3), 49-64. <https://oaji.net/articles/2015/1170-1432714388.pdf>
3. Hema, G., & Gupta, S. (2015). Adversity Quotient for Prospective Higher Education.
4. Donoso, J., Rattray, F., De Bildt, A., Tillmann, J., Williams, P., Absoud, M., & Totsika, V. (2023). Association of cognitive and adaptive skills with internalizing and externalizing problems in autistic children and adolescents. Autism Research, 17(3), 596–609. <https://doi.org/10.1002/aur.3056>
5. Annapurna, A., & Lakshmi, N. (2024). Effects of Life Skills Training on Interpersonal Skills among Secondary School Students. Shanlax International Journal of Arts Science and Humanities, 12(S1-i2-Oct), 58–62. <https://doi.org/10.34293/sijash.v12is1-i2-oct.8419>
6. Dunn, J. & Munn, P. (1986). Siblings and the development of proclal behaviour. International Journal of Behavioural Development, 9(3), 265-284.
7. Kuhon, F. (2020). A study on students' adversity quotient and academic performance in English subject. Journal of Advanced English Studies, 3(1), 24-29. <http://dx.doi.org/10.47354/jaes.v3i1.72>
8. Listiawati, N., & Sebayang, S.K. (2019). THE ASSOCIATION BETWEEN SOCIODEMOGRAPHIC FACTORS AND TEACHERS' GUIDANCE TOWARDS STUDENTS' ADVERSITY QUOTIENT. International Journal of Education.