



RESEARCH ARTICLE

Effect of School Aspects on the Adversity Profile of Higher Secondary School Students

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Abstract

The concept of 'Adversity profile' has attracted significant attention. It is important in psychology because it allows the evaluation of an individual's responses and adaptive strategies in challenging or adverse situations. The objective of this study was to examine the current AQ profiles of students in higher secondary institutions in Gujarat. To explore the issue, the researchers employed a descriptive survey methodology to gather data from 124 English-medium schools in the state of Gujarat. The sample for the study consisted of 3,252 pupils. The data indicate that children in aided schools achieved superior mean scores in the adversity profile, ownership, and reach components compared to their counterparts in unaided schools. In terms of control, ownership, reach, and endurance, the adversity quotient profile of 11th-grade science students is better than that of general stream students.

Keywords: Adversity Quotient, Higher secondary school students, Stream of education, Type of school, Resilience.

Introduction

The adversity quotient gauges a person's ability to navigate challenges. (Stoltz, 1997). It evaluates resilience in a manner similar to how an IQ Quotient measures intelligence ability (Maddi, 2012). Recent research has underscored the significance of emotional and intellectual quotients in attaining success and optimal performance (Goleman, 2001). Stoltz's hardship quotient (AQ), created in 1997, is a novel way to measure how strong and able someone is to handle tough times. Stoltz calls the present time the Age of Adversity in his 1997 book *The Adversity Quotient* (Stoltz, 1997). He says that society is going through a crisis of optimism. Stoltz says that adversity can happen in numerous ways, such as in your

social life, work life, or personal life. Changes in employment, society, and personal life can be challenging to manage. Having a lot of bad things happen to you can make you feel down and cause other problems. This applies equally to both schools and students. Each part of the educational system must deal with unique challenges depending on the context (Johnson & Lazarus, 2008). In order to meet local and national demands for more accountability and student success, school leaders and stakeholders must deal with problems at all three levels, from issues with individual families to community events (Goleman, 1995; Sternberg, 2000).

The permanence or transience of the challenges individuals face influences their perception of control over their environment and destiny (Seligman, 2002). The sense of control will affect many important things, such as how good life is. How people deal with challenges in life is greatly affected by how much they feel in control. Overcoming past challenges makes you more confident and capable of handling new ones. Environmental influences have a big effect on how people deal with problems and how they react to them. People are more likely to succeed when they take charge and see problems as chances to move forward. Stoltz's AQ theory, which is founded on cognitive psychology, helps people deal with hard times and the good things that might come from them. People and organisations must follow AQ. Adversity management skills significantly influence academic achievement. AQ influences factors such as resilience, perseverance, creativity, motivation,

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risk-taking, endurance, and overall success (Stoltz, 1997). The Adversity Quotient (AQ) is a subject of psychological research that examines individuals' responses to adverse circumstances. AQ is the scientific study of resilience, which is the ability of a person to bounce back and adapt to bad things that happen (Maddi, 2012). A high AQ is associated with better performance, productivity, and morale, while a low AQ might lead to emotional responses and a lack of interest in other tasks. AQ consists of four core components: control, ownership, reach, and endurance (Stoltz, 1997). Reach is how many events, both good and bad, affect numerous parts of a person's life. The length of time that these events have an effect is called endurance. Ownership indicates a person's readiness to assume responsibility for the outcomes of challenging circumstances, while control signifies a perceived capacity to handle adverse events. This study examined the Adversity Profile of 11th-grade students in Gujarati English-medium schools, focusing on school-related factors such as school type and educational stream (Wang et al., 2022).

Rationale of the Study

Adversity generally refers to hardship, suffering, or unfavourable life events. A lot of things affect people's personal and professional lives, such as not having access to basic needs, not having enough educational resources, having trouble getting into school, peer pressure, parental expectations, money problems, gender discrimination, and health issues (Seligman, 2002). The idea of Adversity Quotient (AQ) makes many parts of success clearer and more important. This looks at how a person reacts to difficult situations. A common belief in recent decades is that IQ and emotional intelligence can help people do well in school and in business. The increasing frequency of daily problems underscores the necessity of the adaptability quotient (AQ). This study aims to aid curriculum developers, parents, educators, and counsellors in identifying innovative methods for imparting life management skills to children (Hema & Gupta, 2015). Students in senior secondary schools acquire essential life skills and foundational competencies necessary for higher education. Teenagers face several problems that they need help with to be successful (Vinas & Aquino-Malabanan, 2015). This study provides users with their Adversity Profile score and management recommendations. Students can better deal with life's difficulties if they know the AQ levels of their teachers, parents, administrators, faculty, and staff.

Objectives of the Study

- To study the effect of the type of school on the Adversity Profile of higher secondary school students.
- To study the effect of stream of education on the Adversity Profile of higher secondary school students.

Hypotheses of the Study

HO₁. There will be no significant difference in the mean scores of the Adversity Profile of aided and unaided school students.

Sub-hypotheses

- There will be no significant difference in the mean scores of the 'Control' component of students of aided and unaided schools.
- There will be no significant difference in the mean scores of the 'Ownership' component of students of aided and unaided schools.
- There will be no significant difference in the mean scores of the 'Reach' component of students of aided and unaided schools.
- There will be no significant difference in the mean scores of the 'Endurance' component of students of aided and unaided schools.

HO₂. There will be no significant difference in the mean scores of the Adversity Profile of students of science and the general stream of education.

Sub-hypotheses

- There will be no significant difference in the mean scores of the 'Control' component of students of science and the general stream of education.
- There will be no significant difference in the mean scores of the 'Ownership' component of students of science and the general stream of education.
- There will be no significant difference in the mean scores of the 'Reach' component of students of science and the general stream of education.
- There will be no significant difference in the mean scores of the 'Endurance' component of students of science and the general stream of education.

Delimitations of the Study

The study focused on 11th-grade English-medium Science and General students in Gujarat State municipal corporations.

Variables of the Study

Independent variables

Type of School-Aided and Unaided Schools

Stream of Education- Science and General stream of education

Dependent variables

Adversity Profile- Control, Ownership, Reach and Endurance

Operational Definition of Key Terms

Adversity quotient profile

Denotes an individual's ability to manage adverse or unfavourable situations. Participants were classified into

high, moderate, or low Adversity Profiles according to their scores on the four components of the Adversity Quotient Profile scale: control, ownership, reach, and endurance. The students' adversity profile was indicated by their scores on the self-developed adversity profile scale.

Adversity Profile components:

Control

It assesses an individual's perception of control in adverse situations. This indicates a robust dedication to health and resilience. The control quotient of an individual was assessed based on the scores obtained from statements measuring the control component.

Ownership

This assessment evaluates the degree of personal accountability an individual assumes for enhancing a given situation. It demonstrates a strong commitment to accountability and a propensity for action. The scores derived from the statements assessing the ownership component represented an individual's ownership quotient.

Reach

It suggests the perception of the magnitude or scale of events. This serves as a strong indicator of stress levels and the burden of viewpoints. The reach quotient of an individual was assessed based on the scores obtained from statements evaluating the reach component.

Endurance

This concept pertains to the duration of positive or negative events and their subsequent effects. It exhibits a significant degree of optimism or hope. The scores obtained from the statements assessing the endurance component represent an individual's endurance quotient.

Type of school

Schools were classified as either aided or unaided. Aided schools are those that receive any form of support from the government or a sponsoring organisation, while unaided schools are those that do not receive any support at all.

Stream of education

Stream of education was operationally defined into science and General. The General stream of education included Arts and Commerce students.

Higher secondary school students

This referred to the students studying in 11th standard.

Research Method

To assess higher secondary school students' Adversity Profiles, the researcher used a descriptive survey design.

Population and Sample

This study includes eleventh-grade students attending English-medium schools within the Gujarat Municipal

Corporations, encompassing both aided and unaided institutions. A total of 1343 upper secondary schools provided English language instruction, with 1198 being unaided and 145 receiving financial assistance. This study employed stratified random sampling to categorise the municipal corporations of Gujarat. The eight municipal corporations of Gujarat include Gandhinagar, Ahmedabad, Rajkot, Bhavnagar, Jamnagar, Surat, Baroda, and Junagadh. A proportionate random sampling method was employed to select schools from each municipal body in Gujarat. A total of 124 schools participated in the survey, comprising 59 assisted schools and 65 unaided schools. This study employed cluster sampling as the method for selecting participants from the student body. A total of 3,252 samples were collected. The analysis revealed that 48.1% of the 3,252 participants in the sample were affiliated with aided schools, while 51.9% were linked to unaided schools. Additionally, a significant proportion of participants, 43.5% were from the science stream of education, while the remaining 56.5% were from the general stream.

Tools used and Data Collection

A tool was developed for this study to assess the adversity profile. The validity and reliability of this scale were further evaluated. The scale was utilised for assessment and analysis. The final questionnaire comprised 44 items, categorised into four distinct dimensions: endurance (11 statements), reach (9 statements), ownership (13 statements), and control (11 statements). The final tool comprises 15 negative statements and 29 affirmative statements. The researchers utilised the 5-point Adversity profile measure. The total adversity profile scores varied between a minimum of 44 and a maximum of 220. The principal authorised the researcher to gather data from a cohort of eleventh-grade students. During the data collection phase, students were provided with the study instrument, which they subsequently completed. The adversity profile scale presented numerical data. The tool encompassed student data regarding their academic stream (Science or General) and the classification of educational institutions (assisted or unaided).

Data Analysis and Interpretation

After being imported into Microsoft Excel, the data were organised according to the study's goals, variables, and hypotheses. After that, the overall score for each student was figured out and looked at statistically. We calculated the mean, standard deviation, and standard error of the difference for each variable. We employed inferential statistics and the critical ratio (C.R. value) to see if the hypotheses were true.

Effect of Type of School on Adversity Profile

Table 1 presents the estimated C.R. The value was 2.09, whereas for $df=3250$, the table C.R. The value was 1.96 at a significance level of 0.05. The observed value exceeded the

Table 1: Comparison of Total Adversity Profile of Aided and Unaided School Students

Type of school	N	Mean	S.D.	SE _D	C.R Value	Remark
Aided	1563	146.91	8.33	0.30	2.09	Significant at 0.05 level'
Unaided	1689	146.28	8.91			

tabulated value. Given the anticipated C.R., the observed value significantly exceeded the table value at the 0.05 level, leading to the rejection of hypothesis 1. The total adversity quotient between aided and unaided children shows a significant difference, as illustrated in the table. Students in assisted schools exhibited higher overall adversity profile scores than their counterparts in unaided schools. The table

below presents a detailed overview of the adversity profile for both aided and unaided school children (Figure 1).

Table 2 presents the Adversity Profile of both assisted and unaided students, focusing on its components. In the study with df=3250, Ownership and Reach were determined to be 2.40 and 2.29, respectively, while Control and Endurance were measured at 0.49 and 0.38. At a significance threshold of 0.05, the estimated Ownership and Reach C.R. values exceeded the corresponding table C.R. value. Sub-hypotheses 1.2 and 1.3 were rejected due to calculated C.R. values surpassing the corresponding table values. The estimated Control and Endurance C.R. values provided support for null sub-hypotheses 1.1 and 1.4, as they were lower than the corresponding table values. The table presents a comparison of the ownership

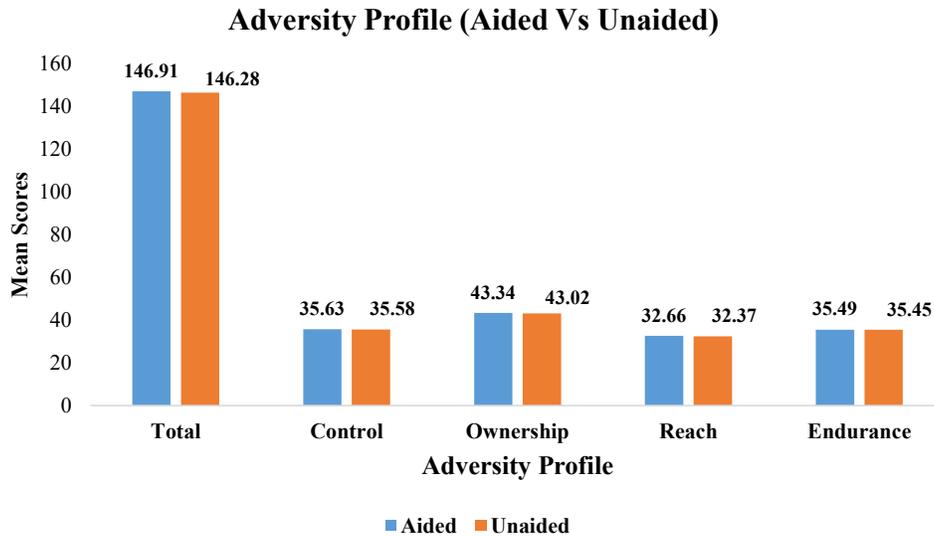


Figure 1: Comparison of the Adversity Profile of Aided and Unaided School Students

Table 2: Comparison of Components of Adversity Profile of Aided and Unaided School Students

Type of School	N	Mean	S.D.	SE _D	C.R Value	Remark
Control						
Aided	1563	35.63	3.26			Not Significant
Unaided	1689	35.58	3.35	0.11	0.49	
Ownership						
Aided	1563	43.34	3.68			Significant at 0.05 level
Unaided	1689	43.02	3.78	0.13	2.40	
Reach						
Aided	1563	32.66	3.75			Significant at 0.05 level
Unaided	1689	32.37	3.34	0.12	2.29	
Endurance						
Aided	1563	35.49	3.33			Not Significant'
Unaided	1689	35.45	3.25	0.11	0.38	

and reach of the adversity quotient between assisted and unaided pupils. The mean scores indicate that control and endurance did not significantly differ between aided and unaided school students, whereas ownership and reach did show significant differences. The ownership and extent of the adversity quotient differed between 11th graders who received assistance and those who did not. The control and endurance levels were similar across the groups.

Effect of Stream of Education on Adversity Profile

Table 3 shows that the C.R value we found was 2.75, while the C.R value in the table was 2.58 at a significance level of 0.01 for df=3250. The computed C.R. value was better than the table value at 0.01. At a significance level of 0.01, the computed C.R. value was higher than the table value, which meant that null hypothesis 2 was not true. The table

Table 3: Comparison of Total Adversity Profile of Students of Science and General Stream

Stream of education	N	Mean	S.D.	SE _D	C.R value	Remark
Science	1406	147.16	8.13	0.29	2.75	Significant at 0.01 level'
General	1846	146.34	8.76			

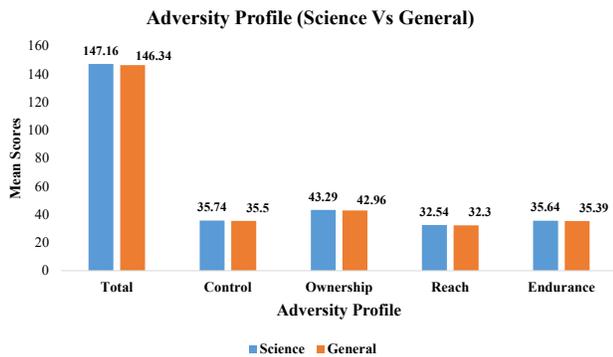


Figure 2: Comparison of Adversity Profile of Science and General Stream Students

shows that students in the science and general streams have different amounts of problems to deal with. The average scores show that science students did better on total adversity than students in the general stream. The adversity quotient profiles of 11th-grade science students and those in the general stream exhibited substantial differences (Figure 2).

Table 4 displays the Adversity Profile for students in scientific and general education, categorised by component. The Control, Ownership, Reach, and Endurance values were 2.03, 2.51, 2.08, and 2.08, respectively, at df=3250. All parts have C.R. values that are higher than the table C.R. value of 0.05. The calculated C.R. values for sub-hypotheses 2.1, 2.2, 2.3, and 2.4 were higher than the table values; hence, these hypotheses were not accepted. The table illustrates that there are big variations between students in the scientific and general streams when it comes to the components of the adversity quotient, such as control, ownership, reach, and endurance. The results showed that there were big differences in all four adversity components between scientific and general stream pupils. Students in the science stream did better than students in the general stream in their control, ownership, reach, and endurance of adversity profiles.

Major Findings

There were big differences in adversity quotient scores between students who went to aided schools and those who went to unsupported schools. The adversity quotient profile and its components, ownership and reach, were stronger among 11th-grade helped students than among their unaided peers; however, control and endurance did not exhibit significant differences between the groups. There were big differences in the adversity quotients of students in both general and science programs. Eleventh-grade science students had a higher adversity quotient profile than their general student classmates when it came to control, ownership, reach, and endurance. (Seligman, M. E. 2002).

Table 4: Comparison of Components of Adversity Profile of Students of Science and General Stream

Stream of Education	N	Mean	S.D.	SE _D	C.R Value	Remark
Control						
Science	1406	35.74	3.22	0.11	2.03	Significant at 0.05 level
General	1846	35.50	3.36			
Ownership						
Science	1406	43.29	3.65	0.13	2.51	Significant at 0.05 level
General	1846	42.96	3.79			
Reach						
Science	1406	32.54	3.26	0.11	2.08	Significant at 0.05 level
General	1846	32.30	3.22			
Endurance						
Science	1406	35.64	3.26	0.11	2.08	Significant at 0.05 level'
General	1846	35.39	3.32			

Discussion and Conclusion

Devakumar M (2012) reported no effect of school type on the adversity profile; however, the current study discovered that students from both aided and unaided schools influenced the adversity quotient profile (Devakumar, 2012). The findings of the present study show that the educational stream significantly influenced students' adversity profiles (Huijuan, 2009). To enhance the Adversity Profile of new postsecondary students, the educational institution must evaluate it and implement customised interventions. Teachers at both schools and colleges should do more in-depth examinations of the environment and come up with new ways to teach. This study underscores the need to employ college counsellors to assist students in identifying their flaws and transforming them into strengths through academic, career, and personal support (Johnson & Lazarus, 2008). Personal traits do not affect the Adversity profile, but more research is needed to understand how important they are. Parents must be adequately informed because an unstable home environment can negatively influence students' emotional and academic outcomes. The study offers insights for subsequent research on adversity profiles and their related characteristics. It also provides guidance for future researchers to develop intervention programs for students who experience difficulties related to adversity.

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