A Study on the Relationship between Adversity Quotient and Job Stress with Special Reference to Chennai City

Sneha Shajan[1], Dr.M.Soundarya[2]

[1]MBA Student, Sathyabama Institute of Science and Technology, Chennai

Orcid id: 0009-0000-6024-9973

[2]Assistant Professor, School of Management Studies, Sathyabama Institute of Science and Technology, Chennai

Orcid id: 0000-0001-7018-797234

Abstract: **Adversity refers to challenging situations or events that test individuals in various aspects of life. How a person responds to adversity determines whether it leads to feelings of disappointment, sadness, despair, and hopelessness, or to growth, happiness, and success. Adversity Quotient (AQ), also known as the science of resilience, measures an individual's capacity to cope with life's challenges. Those with a high AQ are able to persevere and progress despite facing significant obstacles, demonstrating resilience and the ability to rise above adversity. The Main objective of the study is to analyse the relationship between adversity quotient and Job stress.**

Both Primary and Secondary data has been used for the study. The primary data were collected from IT Employees with the sample size for 514. Proportionate sampling method has been used for the study since the population is known. Tools used for the analysis is descriptive statistics, chi square analysis and correspondence analysis and Means score analysis. The findings of the study shows that the 56 per cent of them were having average Job stress; 61 per cent of them were having high time stress. 75 per cent of them were having a average anxiety stress. In the control dimension of AQ, people mostly fall in the category of average with 56 per cent; In the Ownership dimension of AQ, most people were in a low category with 54 per cent; 61 per cent of the respondents are fall in the category of average; In the Endurance dimension, most of the sample fall low category with 67 per cent.

Keywords: **Adversity Quotient, Employees, Job Stress, Control, Reach, Ownership, Endurance.**

1. INTRODUCTION

1.1 Introduction:

Adversity is an inevitable part of life that shapes who we are as individuals. People constantly encounter challenges, which can appear in many forms, whether big or small, real or imagined, self-inflicted or caused by external factors. Adversities are an intrinsic aspect of life, and on any given day, a person may face anywhere from twenty-three to thirty different challenges. Adversity often leads to stress within organizations. Individuals may experience work-related stress in response to various triggers, ranging from minor disruptions to significant adverse events such as economic crises (Harrop et al., 2020; Roux-Dufort, 2009; Turner, 1976). The growing interest in resilience stems from the need to understand how to mitigate the harmful effects of non-resilient responses, which can lead to chronic dysfunction, post-traumatic stress, and other issues (Bonanno & Mancini, 2012). The underlying principle is that greater resilience enables individuals to respond to and navigate life's challenges more effectively and constructively.

Developing resilience not only equips individuals to handle adversity but also contributes to a more fulfilling life, as they are less easily affected by difficult situations. While stress is a topic of significant concern today, it is not a new issue. Pressure is a natural part of work and can help keep people motivated. However, excessive pressure can lead to stress, which undermines performance, poses health risks, and results in costs for employers. Today, stress has become a constant feature across various sectors, with growing competition further increasing stress levels among employees.

According to the International Labour Organization (ILO), job stress is the main health threat in individuals. This could have serious consequences for both mental and physical health (Thielmann, 2021). Job stress is now generally acknowledged as a global issue affecting all professions and all workers in both developed and developing countries.

1.2 Review of Literature:

Somaratne et al. (2019) investigated the relationship between Adversity Quotient (AQ) and perceived stress levels among 223 middle-level managers working in Sri Lanka's non-governmental organization sector. The study employed mean difference analysis and regression analysis, revealing that age, work experience, and academic qualifications significantly impacted AQ levels. The average AQ score was 134.31 out of a possible 200, with a standard deviation of 25.26. The highest mean score of 168.80 was observed in the 55-64 age group, suggesting that greater life experiences may enhance resilience and the ability to cope with adversity, making them more adept compared to younger groups. Similarly, the highest mean AQ score of 166.66 was recorded for individuals with 21-30 years of work experience, implying that prolonged exposure to a specific work environment helps shape employees through extensive experience and training. Furthermore, respondents with postgraduate qualifications had the highest mean AQ score of 148.25. In contrast, gender and marital status did not show any significant influence on AQ levels. According to **Agustina et al. (2020),** the study identified that the adversity quotient had the most significant impact on business success. It examined both the individual and combined effects of locus of control, learning, and adversity quotient on business success. The R² value of 69% indicated that these three variables accounted for 69% of the variation in business success, while the remaining 30% was influenced by other factors. The research concluded that to achieve continued success, entrepreneurs should not only focus on training but also on developing mental and spiritual resilience. This can be achieved through a strong locus of control, on going learning, and a high adversity quotient.

1.3 Objective of the study:

The Main purpose of the study is to analyse the relationship between Adversity Quotient and Job stress with special reference to Chennai.

1.4 Research Methodology:

Research methodology attempts to approach a topic scientifically to validate the research design. In this process the researcher produces authentic research findings. Research design is the procedure for collection of data. This type of research is mainly concerned with description of facts. The sampling procedure begins with the selection of the study area and ends with data collection. The main purpose of the study is to analyse the relationship between Adversity Quotient and Job stress in Chennai. For collecting the data, the researcher selected top five IT Companies in Chennai such as CTS, TCS, WIPRO, IBM and HCL. Top five IT companies were chosen as sample to carry forward the study. The respondents chosen belonged to all these five companies who were from different strat of employment. To complete this research study both qualitative and quantitative methods were used. Qualitative methodology involved interviewing with employees to understand the factors which relate to relationship between Adversity Quotient and Job stress in Chennai.

1.4.1 Sampling design:

Sampling design is a framework that researchers use to select a sample from a population, considering the nature of the inquiry and other related factors (Kothari C.R., 2004). For this study, the researcher employed a standardized sampling design technique to collect a sample from the population. This sample design encompasses the sample size and the sampling process.

1.4.2 Sample Size:

Sample size refers to the number of elements to be included in the study. The total population is 385. To get adequacy of results 30 per cent has been added from the total sample size. Ie. **The sample size for the study is 514.**

Category	Company	Employee Level Chosen			Total
		Manager	**Senior Manager**	**Team Leader**	
Private	CTS	20	26	32	78
Private	TCS	21	18	26	65
Private	WIPRO	18	16	20	54
Private	IBM	27	20	35	82
Private	HCL	35	50	21	106
Total		121	130	134	385

Source: Primary Data

1.4.3 Sample size:

Sample size refers to the number of elements to be included in the study. The total population are 926256. Based on this, by using the given formula the sample size was derived as 385. To estimate the sample size (n) the following formula was considered in the research study.

$$\text{Sample Size (n)} \quad \frac{Z^2 * P * Q * N}{E^2 (N-1) * Z^2 * P * Q}$$

n= the sample size

N= Total Respondents

p = "sample proportion"

q= 1-p

e= the acceptable error

z = the value of standard variation at a given confidence interval, which means the z-score is 1.96

Here n denotes the sample size; p means the percentage of the population, desired margin of error at 5 percent and z is the confidence interval assumed 95 per cent confidence interval, which means the z-score is 1.96.

1.4.4 Sampling Technique:

The sampling method adopted for the data collection is probability method. For selecting the bank branches multistage sampling method was adopted and for selecting the IT Employees.

1.5 Data Analysis and Interpretation:

1.5.1 Adversity Quotient and Its Dimensions – Descriptive Statistics:-

There are four dimensions of adversity quotient such as Control, Ownership, Reach and Endurance are given below.

Table 1.1: Adversity Quotient and Its Dimensions

		Freq	**%**
Control	Low	124	24
	Average	286	56
	High	104	20
Ownership	Low	281	54
	Average	86	17
	High	147	29
Reach	Low	121	24
	Average	312	61
	High	81	16
Endurance	Low	342	67
	Average	58	11
	High	114	22

Source: Primary Data

Control: In the control dimension of AQ, people mostly fall in the category of average with 56 percent; 24 per cent of respondents are fall in the category of low; 20 per cent of respondents are fall in the category of highest scores.

Ownership:

In the Ownership dimension of AQ, most people were in a low category with 54 percent;

17 percent of respondents are fall in the category of average and remaining 29 percent are fall in the category of highest scores.

Reach:

It is observed that in the Reach dimension of AQ, 24 percent of the respondents are fall in the category of low; 61 percent of the respondents are fall in the category of average and remaining 16 percent of the respondents are fall in the category of high.

Endurance:

In the Endurance dimension, most of the sample fall low category with 67 per cent; 11 percent are fall in the category of average and remaining 22 percent are fall in the category of high score.

1.5.2 Job Stress and Its Dimensions – Descriptive Statistics:-

There are four dimensions of adversity quotient such as Control, Ownership, Reach and Endurance are given below.

Table 1.2: Adversity Quotient and Its Dimensions

		Frequency	**%**
Job Stress	Low	186	36
	Average	289	56
	High	39	8
Time Stress	Low	86	17
	Average	116	23
	High	312	61
Anxiety	Low	90	18
	Average	386	75
	High	38	7

Source: Primary Data

From the above table, it intercepts that 36 per cent of them were having low Job stress; 56 per cent of them were having average job stress and 8 per cent of then were having high job stress. Therefore majority of them were having average Job stress. On other hand 17 per cent of them were having low time stress; 23 per cent of them were having average time stress and remaining 61 per cent of them were having high time stress. Therefore majority of them were having high time stress. It is observed that 18 per cent of them were having low a anxiety stress; 75 per cent of them were having a average anxiety stress; and remaining 7 per cent of them were having a high anxiety stress. Therefore majority of them were having average anxiety stress.

1.5.3 Relationship between dimensions of Adversity Quotient & Dimensions of Job Stress – Correlation:-

The Pearson correlation measures the strength of the linear relationship between two variables, represented by the correlation coefficient rrr. This coefficient ranges from -1 to +1. A value of 0 indicates no relationship between the variables, while a positive value (greater than 0) signifies a positive relationship, where an increase in one variable corresponds to an increase in the other. Conversely, a negative value (less than 0) indicates a negative relationship, where an increase in one variable is associated with a decrease in the other. For Pearson correlation analysis, the variables must be measured on a continuous scale. In this study, the correlation is examined between the dimensions of Adversity Quotient® and the dimensions of Job Stress.

As the sample size is large, there may be some difficulty in interpreting the results, as manyof the correlations suggest statistical significance. In these situations, applying the scale suggested by Guilford (1956) (as referenced in Dannhauser, 2007) is required, which offers recommendations for the cut-off points that help explain and comprehend the utility of the correlations among these variables.

Table 1.3: Scale to explain and interpret correlation coefficients

Correlation Coefficient Value	Explanation
< 0.20 = < 4%	Slight, almost negligible relationship.
0.20 - 0.40 = 4 - 16%	Low correlation. Definite, but small relationship
0.40 - 0.70 = 16 - 49%	Moderate correlation. Substantial relationship
0.70 – 0.90 = 49 - 81%	High correlation. Clear, discernible relationship
> 0.90 = 81%+	Very high correlation. Dependable relationship

Table 5.32 shows the explanation and interpretation of correlation coefficients. As the sample size of 400, large proportions of the results appear statistically significant and should be interpreted carefully. For this reason, only those correlations of 0.20 and above indicating a definite relationship and stronger will be discussed.

1.5.4 Relationship between Adversity Quotient and Job Stress - Correlation

There is a significant association between Adversity Quotient® and Job stress among the IT Employees.

Table 1.4: Correlations between AQ & its dimensions with Job Stress & its dimensions

		Job Stress	Time Stress	A
Adversity Quotient®	Pearson Correlation	-.589**	-.556**	-.546**
	p-value	.0001**	.0001**	.0001**
Control	Pearson Correlation	-.428**	-.343**	-.328**
	p-value	.0001**	.0001**	.0001**
Ownership	Pearson Correlation	-.478**	-.463**	-.326**
	p-value	.0001**	.0001**	.0001**
Reach	Pearson Correlation	-.356**	-.342**	-.328**
	p-value	.0001**	.0001**	.0001**
Endurance	Pearson Correlation	-.458**	-.421**	-.376**
	p-value	.0001**	.0001**	.0001**
**. Correlation is significant at the 0.01 level (2-tailed).				
*. Correlation is significant at the 0.05 level (2-tailed).				

Source: Primary Data

1.5.6 Relationship between AQ on Control and Job Stress:

Table: 1.4 show the Pearson correlation among the independent and dependent variable of the study which is Adversity Quotient on control and Job Stress. The correlation between Adversity Quotient on control and Job Stress is r= -.428, which is negatively correlated having Moderate correlation, Substantial relationship. As their sig value is the minimum threshold (0.0001<0.05), Job stress has a negative or inverse correlation. *It was found that there was a significant relationship between Job Stress with Adversity Quotient on control.*

The correlation between Adversity Quotient on control and Time Stress is r= -.343, which is negatively correlated having low correlation, Substantial relationship. As their sig value is the minimum threshold (0.0001<0.05), Time stress has a negative or inverse correlation. *It was found that there was a significant relationship between Time stress with Adversity Quotient on control.*

The correlation between Adversity Quotient and Anxiety Stress is r= -.328, which is negatively correlated having low correlation, Substantial relationship. As their sig value is the minimum threshold (0.0001<0.05), Anxiety stress has a negative or inverse correlation. *It was found that there was a significant relationship between Anxiety stress with Adversity Quotient on control.*

1.5.7 Relationship between AQ on Ownership and Job Stress:

Table: 1.4 show the Pearson correlation among the independent and dependent variable of the study which is Adversity Quotient on Ownership and Job Stress. The correlation between Adversity Quotient on control and Job Stress is r= -.478, which is negatively correlated having Moderate correlation, Substantial relationship. As their sig value is the minimum threshold (0.0001<0.05), Job stress has a negative or inverse correlation. *It was found that there was a significant relationship between Job stress with Adversity Quotient on ownership.*

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The correlation between Adversity Quotient on Ownership and Time Stress is r= -.463, which is negatively correlated having low correlation, Substantial relationship. As their sig value is the minimum threshold (0.0001<0.05), Time stress has a negative or inverse correlation. *It was found that there was a significant relationship between Time stress with Adversity Quotient on ownership*

The correlation between Adversity Quotient on Ownership and Anxiety Stress is r= -.326, which is negatively correlated having low correlation, Substantial relationship. As their sig value is the minimum threshold (0.0001<0.05), Anxiety stress has a negative or inverse correlation. *It was found that there was a significant relationship between Anxiety stress with Adversity Quotient on ownership.*

1.5.8 Relationship between AQ on Reach and Job Stress:

Table: 1.4 show the Pearson correlation among the independent and dependent variable of the study which is Adversity Quotient on Reach and Job Stress. The correlation between Adversity Quotient on control and Job Stress is r= -.356, which is negatively correlated having low correlation, Substantial relationship. As their sig value is the minimum threshold (0.0001<0.05), Job stress has a negative or inverse correlation. *It was found that there was a significant relationship between Job stress with Adversity Quotient on Reach.*

The correlation between Adversity Quotient on Reach and Time Stress is r= -.342, which is negatively correlated having low correlation, Substantial relationship. As their sig value is the minimum threshold (0.0001<0.05), Time stress has a negative or inverse correlation. *It was found that there was a significant relationship between Time stress with Adversity Quotient on Reach.*

The correlation between Adversity Quotient on Reach and Anxiety Stress is r= -.328, which is negatively correlated having low correlation, Substantial relationship. As their sig value is the minimum threshold (0.0001<0.05), Anxiety stress has a negative or inverse correlation. *It was found that there was a significant relationship between Anxiety stress with Adversity Quotient on Reach.*

1.5.9 Relationship between AQ on Endurance and Job Stress:

Table: 1.4 show the Pearson correlation among the independent and dependent variable of the study which is Adversity Quotient on Endurance and Job Stress. The correlation between Adversity Quotient on control and Job Stress is r= -.458, which is negatively correlated having Moderate correlation, Substantial relationship. As their sig value is the minimum threshold (0.0001<0.05), Job stress has a negative or inverse correlation. *It was found that there was a significant relationship between Job stress with Adversity Quotient on Endurance.*

The correlation between Adversity Quotient on endurance and Time Stress is r= -.421, which is negatively correlated having Moderate correlation, Substantial relationship. As their sig value is the minimum threshold (0.0001<0.05), Time stress has a negative or inverse correlation. *It was found that there was a significant relationship between Time stress with Adversity Quotient on endurance.*

The correlation between Adversity Quotient on endurance and Anxiety Stress is r= -.376, which is negatively correlated having low correlation, Substantial relationship. As their sig value is the minimum threshold (0.0001<0.05), Anxiety stress has a negative or inverse correlation. *It was found that there was a significant relationship between Anxiety stress with Adversity Quotient on endurance.*

1.6 Conclusion:

Adverse situations and stress are secondary to the highly competitive environment in which IT professionals operate. In the 21st-century business landscape, work extends beyond the standard 8-hour job, bringing numerous challenges that IT professionals must navigate. These adverse situations can lead to stress, disrupting their work-life balance. The key to managing the constant demands of occupational stress lies in developing effective strategies to handle adversity. A successful IT professional is one who can establish a balanced relationship between managing adversity and coping with occupational stress. The researcher concluded that the 56 per cent of them were having average Job stress; 61 per cent of them were having high time stress. 75 per cent of them were having a average anxiety stress. In the control dimension of AQ, people mostly fall in the category of average with 56 per cent; In the Ownership dimension of AQ, most people were in a low category with 54 per cent; 61 per cent of the respondents are fall in the category of average; In the Endurance dimension, most of the sample fall low category with 67 per cent.

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