

**DEVELOPMENT OF A PROGRAMMME FOR  
ENHANCING ADVERSITY QUOTIENT®  
OF STD VIII<sup>th</sup> STUDENTS**

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of the requirements for  
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I dedicate this dissertation to my  
**PUJYA GURUDEV SHANKAR BHAGWAN**  
who gave me the inspiration to proceed  
in life and pursue education as my goal.

**Gurur Brahma Gurur Vishnu**

**Gurur Devo Maheshwaraha**

**Gurur Saakshat Para Brahma**

**Tasmai Shri Gurave Namaha**

## **DECLARATION**

I hereby declare that this thesis is my own work and effort and that it has not been submitted anywhere for any award.

Where other sources of information have been used, they have been acknowledged.

**Signature:** .....

**(Ms. Priyanka Jain)**

**Date: /04/2013**

## **CERTIFICATE**

This is to certify that the work contained in this dissertation titled, “DEVELOPMENT OF A PROGRAMME FOR ENHANCING ADVERSITY QUOTIENT® OF STD VIII<sup>TH</sup> STUDENTS”, submitted by Ms. Priyanka Jain to the Department of Education, S.N.D.T Women’s University, Churchgate for the degree of Master of Education, is a genuine record of bonafide research work carried out by her under my supervision and guidance.

I further certify that the results embodied in the same, have not been submitted elsewhere for the award of any degree or diploma.

I consider this worthy for the award of degree of Master of Education.

**Place: Mumbai**

**Date: /04/2013**

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**Dr. Rekha Chavhan**

(Guide)

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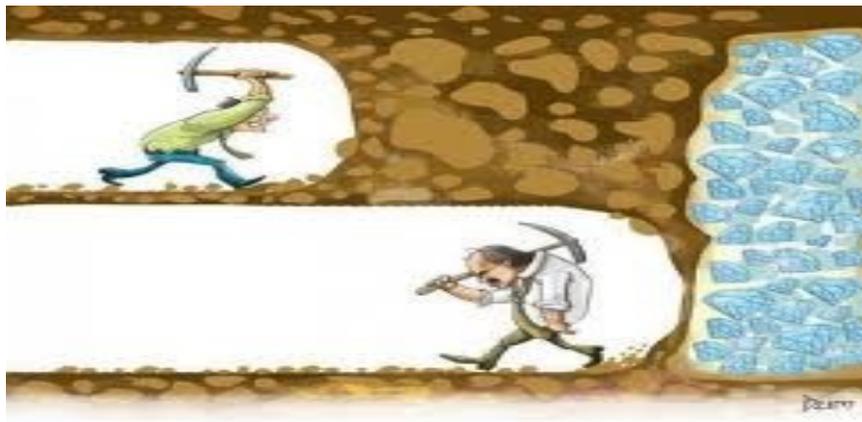
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## **You Mustn't Quit**

**When things go wrong, as they sometimes will,  
When the road you're trudging seems all uphill,  
When the funds are low and the debts are high  
And you want to smile, but you have to sigh,  
When care is pressing you down a bit,  
Rest! If you must---but never quit.  
Life is queer, with its twists and turns,  
As every one of us sometimes learns,  
And many a failure turns about  
When he might have won if he'd stuck it out;  
Stick to your task, though the pace seems slow---  
You may succeed with one more blow.  
Success is failure turned inside out---  
The silver tint of the clouds of doubt---  
And you never can tell how close you are,  
It may be near when it seems afar;  
So stick to the fight when you're hardest hit---  
It's when things seem worst that YOU MUSTN'T QUIT.**

**- Anonymous**



# CHAPTER ONE

## INTRODUCTION

### 1.1 Prologue

“Strength does not come from winning. Your struggles develop your strengths. When you go through hardships and decide not to surrender, that is strength.”

– Mahatma Gandhi

Today a student faces many difficulties in his daily life. He has to develop his strengths to handle these difficulties. As quoted above Gandhiji has put down what strength is. According to Gandhiji when a person faces the hardships and goes on, then it is strength and it does not mean always winning. Thus, a student comes across many problems, it may be related to academics, home environment, socio-economic situations, identity crisis, relations with peers, physical, emotional, social and intellectual which can lead the student to dropping out of schools, suicides, acquisition of bad habits, substance abuse, violence, depression, stress, anxiety disorder, accident, altruism, homicide etc. Thus resulting in creating hardships for the students.

The globalization and urbanization has lead to a lot of challenges in front of the students. Today’s students need to understand that only becoming successful in academics is not important, the student has to learn to handle the hardships that may come across in life. Thus the student can be termed as successful.

According to Dr. A. P. J. Abdul Kalam, “Any task you do you have to come across problems, problems should not become captain of the individual, but the individual should become the captain of the problem, defeat the problem and succeed”

Success is desired by everyone, it can be you, me or any person, but very few people become successful. The one’s who became successful had to

face many adversities, not only did they face it; they even overcame it and lead a successful life. Thus, this struggle against adversity is always going to be there even after leaving school i.e. at the stage of graduation/ post graduation, the place of work, after marriage, after having kids and also in their old age. No person moves ahead without facing adversities, as a child the adversities faced are different; they keep on changing with age, time and place. Dr. Paul Stoltz said, “Each child must develop the ability to turn obstacles into opportunities for which Adversity Quotient<sup>®</sup> (AQ<sup>®</sup>) is the word of the hour.” ( Stoltz, 1997).

## **1.2 Concept of Adversity Quotient<sup>®</sup>**

The Adversity Quotient<sup>®</sup> was designed by a California consultant named Dr. Paul Stoltz, who had been researching how people have been responding to the day’s adversities for 20 years. Stoltz’s research indicates that some people – individuals he characterizes as having a high Adversity Quotient<sup>®</sup> – do all of these things as a matter of course. It’s part of which they are, a pattern of responses acquired in childhood. The pattern of responses of people with low AQs leads all too often to panic and indecision. Stoltz firmly believes, however, that people can change. The key is simple self – awareness. If people listen to their responses and don’t like what they hear, they can make a change for the better.

AQ<sup>®</sup> is about what it takes to get things done in highly demanding times. AQ<sup>®</sup> is a scientifically grounded theory that describes, measures, and strengthens how people respond to the full range of adversities that now comprise a typical day.

According to Dr. Paul Stoltz (2000), AQ<sup>®</sup> is the science of human resilience. People, who successfully apply AQ<sup>®</sup>, perform optimally in the face of adversity the challenges, big and small, that confront us each day. In fact, they not only learn from these challenges, but they also respond to them better and faster.

AQ<sup>®</sup> is an extremely robust predictor of performance, effectiveness, learning, innovation, resilience, promotability, wealth and health.

### **Assumption of AQ<sup>®</sup>**

The assumption of AQ<sup>®</sup>, or Adversity Quotient<sup>®</sup>, is that to expand human capacity as well as our ability to assimilate and implement new knowledge, we must, therefore, first strengthen the human operating system, so all software (knowledge, skills, talents, experiences) are accessed and optimized more effectively. Only in this way can we fully leverage our human capital. This is the essence of AQ<sup>®</sup>.

### **AQ<sup>®</sup> V/S IQ and EQ**

Intelligent Quotient (IQ) measures a person's knowledge. But IQ is not the only criteria to be successful. Emotional Quotient (EQ) is capacity to manage ones emotions. Thus a high IQ and a high EQ strengthens the chance of success. Then comes AQ<sup>®</sup> which measures the person's ability to overcome the hardships of life and move ahead. Thus only IQ and EQ can also sometimes not be responsible for success, as AQ<sup>®</sup> is needed to keep striving hard in tough situations.

**Table 1.1**  
**Dimensions of AQ<sup>®</sup> (CORE)**

Sr.	Dimension	What it is	What it determines
1	Control (C)	The extent to which someone perceives they can influence whatever happens next.	Resilience, Health and tenacity.
2	Ownership (O)	The likelihood that someone will actually do anything to improve the situation regardless of their formal responsibilities.	Accountability, responsibility, action and engagement.
3	Reach (R)	The extent to which someone perceives an adversity will reach into and affect other aspects of the situation or	Burden, Stress, Energy and Effort.

		beyond.	
4	Endurance (E)	The length of time the individual perceives the adverse situation.	Hope, Optimism, and willingness to persevere.

### **Building blocks of AQ<sup>®</sup>**

The three building blocks of AQ<sup>®</sup> – namely cognitive psychology, psychoneuroimmunology and neurophysiology gave a stable ground to the study of AQ<sup>®</sup> as well as the findings of these sciences match with those of AQ<sup>®</sup> studies.

There are four key facts that emerge from the convergence of the above three building blocks of AQ<sup>®</sup> (Stoltz, 1997).

1. We respond to adversity in hard wired patterns.
2. We are often poor judges of these patterns.
3. These patterns can be measured.
4. These patterns can be rewired and improved.

The work done on AQ<sup>®</sup> builds upon the landmark research of dozens of top scholars and more than 1500 studies from around the world. As a result of 37 years of research and 10 years of application, AQ<sup>®</sup> is a major breakthrough in understanding of what it takes to succeed. According to Dr. Stoltz, success in work and in life is largely determined by ones Adversity Quotient<sup>®</sup>:

1. AQ<sup>®</sup> tells how well one with stands adversity and has the ability to surmount it.
2. AQ<sup>®</sup> predicts who will overcome adversity and who will be crushed.
3. AQ<sup>®</sup> tells who will exceed expectations of their performance and potential and who will fall short.
4. AQ<sup>®</sup> predicts who gives up and who prevails (Stoltz, 1997).

### **Climber, Camper and Quitter**

According to Dr. Stoltz (1997),

#### The Quitter

Without a doubt, there are plenty of people who choose to opt out, cop out, back out, and drop out. These are the Quitters. Quitters abandon the climb. They refuse the opportunity the mountain presents. They ignore, mask, or desert their core human drive to Ascend and with it much of what life offers.

#### The Camper

The second group of individuals is Campers. These people go only a bit far and camp down to hide from adversity. And there, they choose to sit out their remaining years. Campers, unlike Quitters, have at least taken on the challenge of the Ascent. They have gained some ground. Their journey may have been easy, or they may have sacrificed much and worked diligently to get as far as they have.

#### The Climber

I call the people who are dedicated to the lifelong Ascent Climbers. Regardless of background, advantages or disadvantages, misfortune or good fortune, they continue the Ascent. They are the Energizer™ Bunnies of the mountain. Climbers are possibility thinkers, never allowing age, gender, race, physical or mental disability, or any other obstacle to get in the way of the Ascent. They are the winners.

### **1.3 Need of the study**

Initially IQ was only considered for success of an individual in education. As years passed by then came the EQ and then these two were considered for the success of an individual. But these only measure your knowledge and ability to cope emotions. Do these make the individual successful? The answer is “No”. Individuals also face adverse situations in life and if these adversities are overcome then a person is considered successful.

The researcher feels that students face lot of adversities like high stress level during exams, group conflicts, child abuse, parental pressures, competition, financial problems, status problems, identity crisis, failure in exams, low self esteem, etc. which leads the student to dropping out of schools, suicides, acquisition of bad habits, substance abuse, violence, depression, stress, anxiety disorder etc.

Adolescents are a positive resource for the country. Adolescent at the same time is a critical period for the development of self identity. The problem age is, between 11 to 14 years during which they face physical, social, emotional and intellectual problems.

The researcher feels the need to make the students of standard VIII aware of coping with the adversities they are facing or going to face in latter period of life. So that, they will be able to overcome, the adversities and become good citizens in the era of knowledge explosion, technological advancement and globalization. The researcher also feels that as in the coming years the students will pass out and move to higher classes which will bring parental pressure in academics and also the other physical changes that they are going to cope with, require high AQ<sup>®</sup>. Thus, for these reasons researcher developed a program for the students to strengthen their AQ<sup>®</sup> for dealing with the adversities that they will be facing in the coming years.

The researcher while doing review of related literature came across only three studies related to AQ<sup>®</sup> in the field of education in India. The researcher found no study related to development of programme for the school children, who are in a confused state of mind and dealing with lot of problems during this period. Thus to make them more resilient so as to cope with the daily challenges and the challenges of future, the researcher developed a set of 12 activities for enhancing the AQ<sup>®</sup> of the students.

#### **1.4 Statement of the problem**

Development of a Programme for Enhancing Adversity Quotient® of Std VIII<sup>th</sup> students.

### 1.5 Variables of the study

- Independent variable – Programme
- Dependent variable – Adversity Quotient®

### 1.6 Operational definitions

- **Adversity Quotient®**

Adversity Quotient® can be defined as the science of human resilience. It is a method of measuring and strengthening resilience. (Stoltz, 1997)

- **Adversity Quotient Profile®**

Adversity Quotient Profile® is a self rating scale which describes pattern of response to adversity with –

**Control**

It measures the degree of control that a person perceives over adverse events. It is a strong gauge of resilience and health.

**Ownership**

It measures the extent to which a person holds himself or herself accountable for improving a situation. It is a strong gauge of accountability and likelihood to take action.

**Endurance**

It is the perception of time over which good or bad events and their consequences will last or endure. It is a strong gauge of hope or optimism.

**Reach**

It is the perception of how large or far reaching events will be. It is a strong gauge of perspective burden and stress level.

- **Programme**

The programme refers to the development of set of activities for enhancing the AQ<sup>®</sup> of students.

➤ **Effectiveness of the Programme**

It is the gain in the post test scores of AQ<sup>®</sup> of experimental group students.

**1.7 Objectives of the study**

- To develop the programme for enhancing the AQ of standard VIII students.
- To study the effectiveness of the developed program.

**1.8 Hypothesis of the study**

For the present study the null hypotheses formed was –

There will be no significant difference in the post-test means of AQ of standard VIII<sup>th</sup> students, of the experimental and control group students.

**1.9 Scope and delimitations of the study**

- The present study was confined on standard VIII<sup>th</sup> students only.
- The study was restricted to English medium schools only.
- The study was confined to S.S.C board schools of Mumbai, namely, Friends Co-operative Educational Society Ltd. and Lokmanya Tilak English Medium School (Mulund – West).
- The study was limited to Mumbai city.

**1.10 Educational significance**

The researcher found the present study significant in the field of education for the teachers, principals, students, counselors, management authorities, curriculum developers and the parents. AQ<sup>®</sup> is about creating resilient individuals, this study brings the following significance:

- It will help teachers to bring about resilience in students by implementing a program and look into the holistic development of the child.
- It will help principals to deal with other staff members, management in school and administrative difficulties systematically.
- The principal can keep workshops and seminars for teachers, parents and students on the basis of the program to increase AQ<sup>®</sup>.
- It will be of help to counselors to identify the low AQ<sup>®</sup> students and give them proper guidance in vocational, personal, social, educational problems.
- It will help the curriculum developers to include AQ<sup>®</sup> content in the curriculum of Bachelor of education and Master of education degrees to train teachers to help students handle adversities better.
- It will be of help to school authorities to hire resilient staff for the school.
- It will be of help to parents to understand their children's AQ<sup>®</sup> and develop a positive atmosphere at home.

Thus the researcher feels that this study will benefit a large number of people in the field of education according to age, time and place.

## CHAPTER TWO

### REVIEW OF RELATED LITERATURE

“I not only use all the brains that I have, but all that I can borrow.”

– Woodrow Wilson

#### 2.1 Prologue

A review of related literature serves as an integral component of any dissertation. Research may be done alone – but it is never done in isolation. The production of new knowledge is fundamentally dependent on past knowledge. Knowledge is cumulative; every piece of research will give rise to and contribute to another piece of such studies. A true effective review will be a pace-setter that stimulates further research efforts and also plays a very significant role in shaping the nature of that research. The review of related literature enables the researcher to further clarify his objectives and to define the limits of his field avoiding unfruitful and useless problem areas. There should be clear links between the objectives of your research and the literature review.

These materials are usually found in books, encyclopedias, journals, magazines, dissertations, theses, websites and newspapers from printed or online sources.

Review of literature is essential for the following reasons:

1. It is essential for every investigation to be up to date in his information about the literature, related to a problem already done by others. It is considered as the most important pre-requisite to actual planning and conducting the study.

2. It avoids the replication of the study of findings to take an advantage from similar or related literature as regards to methodology, techniques of data collection, procedure adopted and conclusion drawn. It allows to justify one's own endeavor in the field.

3. It provides a source of problem of study, an analogy may be drawn for identifying and selecting the own problem of research. The researcher formulates hypothesis on the basis of review of literature.

4. It also provides the rationale for the study. The results and findings of the studies conducted earlier can also be discussed at length. (Singh, 2008).

The review of literature indicates the clear picture of the problem to be solved.

Bruce W. Tuckman (1978) has enumerated the following purposes of the review –

1. Discovering important variable.
2. Distinguishing what has been done from what needs to be done.
3. Synthesizing the available studies to have perspective.
4. Determining meanings, relevance of the study and relationship with the study and its deviation from the available studies.

For the present study, the researcher has reviewed the studies mentioned below.

## **2.2 Studies conducted in India**

**Tripathi, S . (2012).** studied the **Use of Adversity Quotient AQ in creating strong business leaders of tomorrow.** This study assesses the

Adversity Quotient<sup>®</sup>, a measure of one's ability to prevail in the face of adversity, of 131 top management professionals/Leaders engaged in adding value to their people & business. Findings offer strong support to the view that one's AQ<sup>®</sup>, particularly as it relates to the "Control, Reach Ownership and Endurance over one's adversities", reliably can be used as a yardstick to identify leaders who create "sustainable optimism" in their people & organization and direct them to excellence in overall performances & growth.

**Sachdev, P. (2011).** studied the **Effectiveness of an Intervention Programme to Develop Adversity Quotient<sup>®</sup> of Potential Leaders.** The purpose of the study was to develop an intervention programme on AQ<sup>®</sup> and to study its effectiveness. The study also focused on ascertaining the relationship between the variables total AQ<sup>®</sup> of potential leaders on the basis of gender, age, academic faculty, academic achievement and experience. The sample consisted of 1053 management and teacher educators. A descriptive and experimental study was done and the study revealed that lower academic achievement respondents score significantly higher than higher academic achievement respondents on Control Dimension. Females score significantly higher than males on Control. The lower academic achievement sub-group scores significantly better than those with higher academic achievement on Control. There are no significant differences in post-test mean scores of the different sub-groups on Ownership dimension. The older and the experienced respondents score significantly higher on Reach dimension. They are better able to find the right balance to enable them to isolate an adversity from the rest of their lives. Older as well as the experienced respondents score significantly higher than the younger and the nil experience groups. The experimental group is seen to move from a borderline low moderate level to a moderate level on Control and Ownership dimensions and from a low to a moderate level on Reach and Endurance dimensions and on Total AQ<sup>®</sup> by the end of the intervention programme. The intervention programme benefits male

participant's more than female participants in developing their Endurance dimension.

**Tarapurwala, N. (2010).** conducted a study **on some correlates of AQ<sup>®</sup> of college students.** The objective of the study was to ascertain relationship between the variables-AQ<sup>®</sup> and socio economic status of students from degree college. Descriptive study was used.643 students of F.Y degree colleges of Greater Mumbai were selected as sample. It was found that there is no significant difference between AQ<sup>®</sup> and control, ownership and endurance .There is no significant difference between reach dimension and AQ<sup>®</sup> of the students. There is no significant difference between AQ<sup>®</sup> and socio economic status of the students.

**Almeida, A. (2009).** developed a **programme for enhancing the AQ<sup>®</sup> of junior college students.** The objectives of the study were to develop a programme for enhancing the AQ<sup>®</sup> of Junior college students and to study its effectiveness. Quasi experimental, Pretest Posttest non-equivalent group design was used for the study. Total 100 students, 50 in experimental group and 50 in control group of Junior college of Vasai were selected as sample. It was found that there is significant difference between AQ<sup>®</sup> of experimental group and control group. The students of experimental group showed enhanced AQ<sup>®</sup> in the post test than the control group. The ability to handle adversities had increased after implementation of programme on experimental group.

**Dsouza, R. (2006).** conducted a Study on **Adversity Quotient<sup>®</sup> of Secondary Schools in Relation to their School Performance and School Climate.** The Objectives of the study was to study AQ<sup>®</sup>, school performance and school climate and to compare the AQ<sup>®</sup> and performance of different types of school namely SSC, ICSE and CBSE boards. A descriptive method of comparative and correlational type was used for the present study. 548 Secondary school students of 9th standard of SSC, ICSE and CBSE English

medium boards of Greater Mumbai were selected for the study. It was found that there is significant difference in the AQ<sup>®</sup> of SSC, ICSE and CBSE schools. The student of ICSE and CBSE school types showed better ability to handle adversities than SSC school students. It also indicated that student with low AQ<sup>®</sup>, irrespective of their school type responded in a similar manner to adverse situation. An increase in AQ<sup>®</sup> score had increased their school performance directly so they can be correlated. An increase in the ability to handle adversities corresponds to better performance.

### **2.3 Studies conducted Abroad**

**Cornista, G., & Macasaet, C. (2012).** studied **Adversity Quotient<sup>®</sup> and Achievement Motivation of Third Year and Fourth Year Psychology Students of de la Salle Lipa.** The purpose of the study was to determine the profile of the respondents in terms of age, gender and year level to acquire the level of Adversity Quotient<sup>®</sup> of the respondents in terms of Control, Ownership, Reach, Endurance, and their overall AQ<sup>®</sup>; to Find out relationship in the Adversity Quotient<sup>®</sup> of the respondents according to age, gender, and year level; to find out the relationship between the Adversity Quotient<sup>®</sup> and the Achievement Motivation of the respondents. A descriptive-co relational study was done. 90 third and fourth year Psychology students of De La Salle Lipa were selected for the study. It was found that age and gender difference did not affect the Adversity Quotient<sup>®</sup>. Respondents who are in the 4th year level have lower level of ownership compared with those of lower year level. Those respondents with high level of control and ownership have high level of motivation for achievement. Those respondents with high level of AQ<sup>®</sup> have high level of motivation for achievement. Those with high level of reach and endurance have high level of inner resource. Respondents with high level of AQ<sup>®</sup> have high level of inner resources. Respondents with high level of AQ<sup>®</sup> have high level of interpersonal strengths as well. Those respondents with low

level of control have low level of work habits. Those respondents with low level of AQ<sup>®</sup> have low level of work habits.

**Cura, J., & Gozum, J. (2011).** did a **Correlational Study on Adversity Quotient<sup>®</sup> and the Mathematics Achievement of Sophomore Students of College of Engineering and Technology in Pamantasan ng Lungsod ng Maynilaw** the purpose of the study was to ascertain the relationship between mathematics achievement and the Adversity Quotient<sup>®</sup> of second year students of Pamantasan ng Lungsod ng Maynilaw on the basis of gender, course, type of school they graduated from, scholastic status, scholarship program and academic status. A descriptive method was applied. 398 second year engineering students of Pamantasan ng Lungsod ng Maynilaw- College of Engineering and Technology were selected for the present study. It was found that the level of Adversity Quotient<sup>®</sup> among the highest percentage of respondents is below average. The Adversity Quotient<sup>®</sup> of the respondents was not influenced by their sex, course, academic status, scholastic status, scholarship grant and the type of high school they graduated. The dimensions of Adversity Quotient<sup>®</sup> such as Control, Ownership and Endurance had a significant relationship with the Mathematics achievement of the respondents in the study. The level of Adversity Quotient<sup>®</sup> and the Mathematics Achievement of the respondents were significantly related with one another.

**Deesom, N. (2011).** studied the **effectiveness of positive thinking program on AQ<sup>®</sup> of 6<sup>th</sup> students** to study result of positive thinking program on AQ<sup>®</sup> of 6<sup>th</sup> students and to compare the AQ<sup>®</sup> between students who participated in this programme to other students. Quasi Experimental, 'Pretest posttest design' was used. Total 20 6<sup>th</sup> standard students were selected as sample for the study, 10 in experimental and 10 in control group. It was found that the score of AQ<sup>®</sup> of experimental group was higher than the controlled group and the programme was found to be effective.

**Liu, L. (2011).** studied **relationship between AQ<sup>®</sup>, work pressure, personal characteristics and work performance** to ascertain relationship between personality traits, AQ<sup>®</sup>, work stress and work performance among different gender roles and to provide entrepreneurs a direction of recruiting and training their employees and to create the enterprises competitive power. A descriptive type of study was used. 693 office workers in Taiwan were studied as sample. It was found that different gender roles had significant difference in AQ<sup>®</sup>. Personality trait had a positive influence on AQ<sup>®</sup>. AQ<sup>®</sup> does not have a negative influence on work stress. AQ<sup>®</sup> has positive influence on work performance. Personality trait has a significant influence on work performance via AQ<sup>®</sup>.

**Patdo, V. (2011).** studied the **Adversity Quotient<sup>®</sup> of Parents with Special Needs Children and Adversity Quotient<sup>®</sup> of Parents with Normal Children** to find the significant relationship between the Adversity Quotient<sup>®</sup> of Parents with Special Children and Adversity Quotient<sup>®</sup> of Parents with Normal Children. The sample selected was 90 parents with Special Needs Children and Parents with Normal Children. A descriptive study was done. The findings revealed that the highest level of Adversity Quotient<sup>®</sup> among the respondents is average. The overall mean in AQ<sup>®</sup> of the respondents of Parents with Special Children is 122.05 and Adversity Quotient<sup>®</sup> of the respondents of Parents with Normal Children is 147.48. The Adversity Quotient<sup>®</sup> of the respondents was not influenced by their Age and Gender. The level of Adversity Quotient<sup>®</sup> of Parents with Special Children and the Adversity Quotient<sup>®</sup> of the respondents of Parents with Normal Children were not significantly related with one another.

**Ye, S. (2011).** studied **religious beliefs and AQ<sup>®</sup> of high school teachers** to study difference in AQ<sup>®</sup> of teachers in religious founded high schools and general high schools and To discuss the interrelationship between religion, AQ<sup>®</sup>, work stress, job satisfaction among school teachers. A

descriptive study was conducted. 484 high school teachers in Southern Taiwan were selected as sample. It was found that religious belief does not affect general school teacher's response to the feeling of stress and satisfaction. Religious founded high schools answered the feeling of stress and satisfaction with non-self ability.

**Canivel, L. (2010).** studied **Principals Adversity Quotient®: Styles, Performance and Practices** to study AQ® profile of the principals. To study the effect of AQ Profile® to performance and practices. To study relationship between the principals AQ® with the principals leadership styles. To study relationship between the principals AQ® and leadership styles with the principals demographic profiles. A descriptive type of study and also qualitative study was used. 47 principals from 40 private schools in the province of Rizal were selected as sample. It was found that the principals AQ® profile in private schools has an average score. The ownership dimension got score below average. Both performance and practices have positive response to AQ®. There was no correlation between the principals AQ® and the principal's leadership styles. The AQ® and leadership style of the principal's responses has no significant correlation with demographic profiles.

**Enriquez, J. (2009).** studied **effectiveness of a mentoring program on the AQs of college freshmen** to develop a mentoring programme and to study effectiveness of programme on AQ®. Experimental design-The one group Pre test Post test was used. 181 college students from 17 courses of a college were selected as sample. It was found that the AQ® scores improved for most of the student and the programme proved to be effective.

**Huijuan, Z. (2009).** studied **relationship between AQ® and academic performance of college students** to ascertain the AQ® and academic performance of students on the basis of sex, course and year level. To ascertain the differences and relationship on the basis of sex, course, year level and

academic performance. A descriptive type of study was used. 280 college students were selected as the sample. It was found that there is significant relationship between AQ<sup>®</sup> and academic performance of the students. The AQ<sup>®</sup> of students was not influenced by sex. The AQ<sup>®</sup> of students was found to be in relation with course and year level.

**Pangma, R. (2009).** studied the **various (variables) factors influencing student's Adversity Quotient<sup>®</sup> of 12<sup>th</sup> grade and 3<sup>rd</sup> year vocational students** to study the factors (variables) influencing students adversity of 12<sup>th</sup> grade and 3<sup>rd</sup> year vocational students. A descriptive type of study was used. 672 students of 12<sup>th</sup> grade and 376 3<sup>rd</sup> year vocational students was the selected sample. There are factors influencing the AQ of 12<sup>th</sup> grade and 3<sup>rd</sup> year vocational students like dominance, sense of personal freedom, self esteem, enthusiasm, self confidence, ambition and achievement motivation. Factors directly influencing the AQ<sup>®</sup> of 12<sup>th</sup> grade students are self confidence while the variables both directly and indirectly influencing the AQ<sup>®</sup> of students were dominance, sense of personal freedom, self esteem and enthusiasm. Variables directly influencing AQ<sup>®</sup> of 3<sup>rd</sup> year vocational students was achievement motivation, the variable indirectly influencing the AQ<sup>®</sup> of these students were dominance while the variables both directly and indirectly influencing the AQ<sup>®</sup> of students were sense of personal freedom, self esteem, enthusiasm, self confidence and ambition.

**Langvardt, G. (2007).** did a **case study on Resilience and Commitment to Change of a Nonprofit Organization** to ascertain relationship between an organizations resilience and commitment to change. To ascertain relationship among members, employees and leadership of an organizations resilience and its commitment to change. To ascertain relationship between members and non-members of an organizations resilience and its commitment to change. A descriptive type of study was used. 81 individuals consisting of adult employees, members and parents of students of

a nonprofit organization in California were selected as sample. It was found that there is positive correlation between an organizations resilience and commitment to change. It was also seen that there is a relationship among members, employees and leadership of an organizations resilience and commitment to change. The members and non members showed a positive relationship in organizations resilience and commitment to change.

**Haller, H. (2005).** conducted a **Hermeneutic Phenomenological Inquiry into Adversity and Obstacles in the Shaping of Prominent Leaders** to investigate the possible relationship or impact that adversity, obstacles and challenges had on the shaping and development of prominent leaders. A descriptive Study-Interview technique was used. 16 participants- 2U.S senators,1 retired army general,1 president of a large educational foundation, 2 billionaires, 1 chairman and 9 chief executive officers of six major companies was the selected sample. It was found that Obstacles and adversity were perceived as challenges which could be turned into opportunities. Facing adversity and successfully overcoming obstacles was important in their progression and growth as leaders. Having mentors to help guide, motivate, and inspire them was very important. Being a Servant-Leader, serving people, and being humble were essential. Having a strong religious faith and or strong family ties, or both, was important and helpful. Their concepts and ideas about the nature of leadership influenced their experiences heavily.

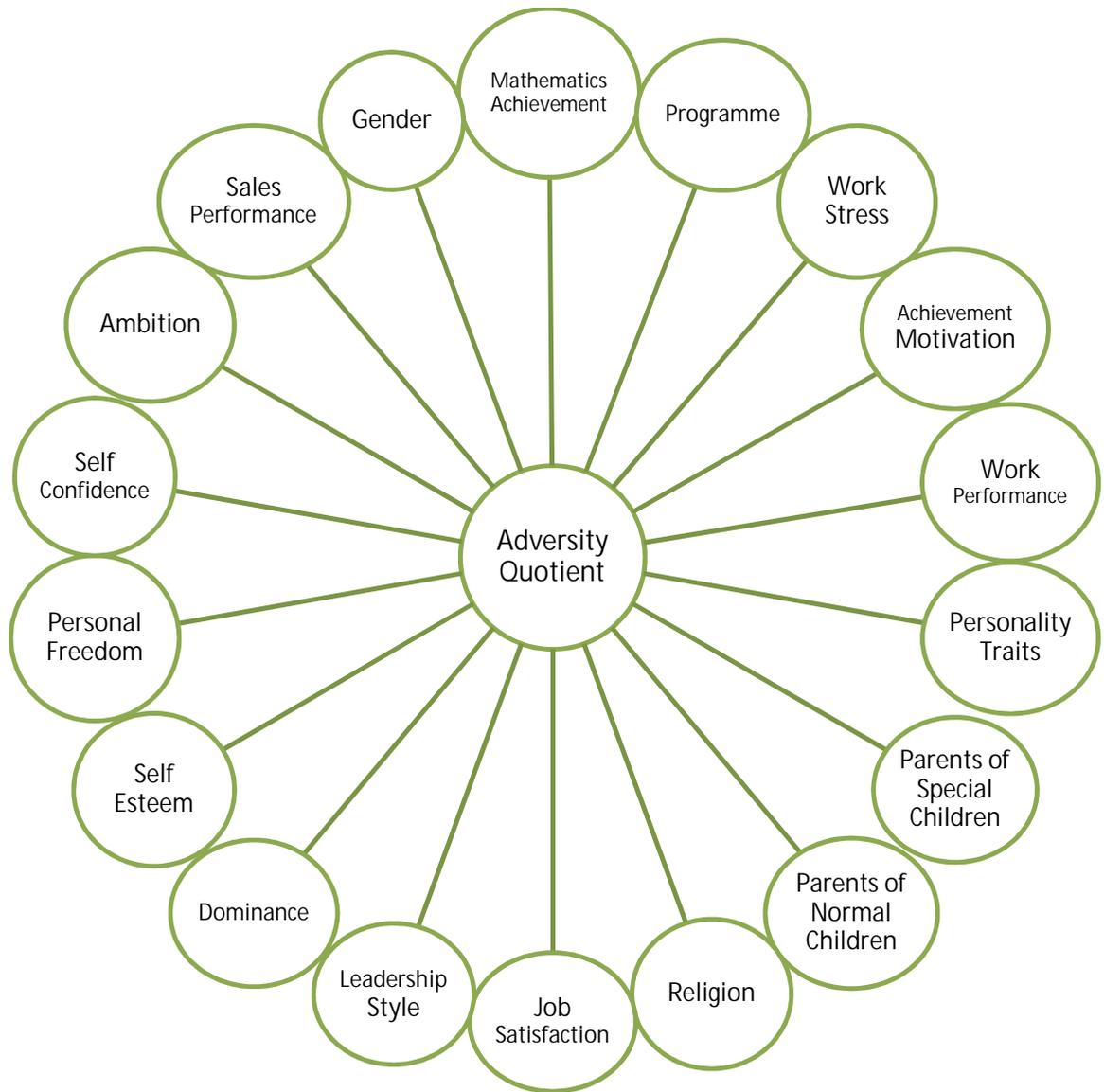
**Johnson, M. (2005).** did a study on **Optimism, Adversity and Performance: Comparing Explanatory Style and AQ<sup>®</sup>** to ascertain relationship between Explanatory Style and AQ<sup>®</sup> and to ascertain Explanatory Style and AQ<sup>®</sup> to Sales Performance. A descriptive study was used. 112 employees of Fortune 500 Company were selected as the sample. It was found that the AQ<sup>®</sup> model provided a more complete and consistent frame work for identifying who is empowered and who is helpless. The higher the sales persons AQ<sup>®</sup> the better was the performance.

**Villaver, E. (2005).** studied **Adversity Quotient<sup>®</sup> Levels of Female School Teachers of a Public and a Private School** to ascertain the significant differences in AQ<sup>®</sup> level of female grade School Teachers of a Public and a Private School. A descriptive Study was used. The sample selected for this study was 105 female grade School Teachers 74 from public schools and 31 from private schools. It was found that the AQ<sup>®</sup> level of teacher respondents in early adulthood stage had moderate AQ<sup>®</sup>. The older teacher respondent had low AQ<sup>®</sup>. The single respondents were found to have equal percentages for moderate and moderately low AQ<sup>®</sup>. The married respondent had moderate AQ<sup>®</sup>. Respondents with low socio-economic status had moderate AQ<sup>®</sup>. Middle class respondents had moderately low AQ<sup>®</sup>. It was found that the AQ<sup>®</sup> level of female School Teachers of a Public and a Private School showed no significant differences.

**Figure 2.1 Showing Variables on which Studies were conducted in India**



## 2.2 Figure showing Variables on which Studies were conducted Abroad



## **2.4 Insight gained from the review**

The researcher while doing review of literature came across some studies conducted on AQ in India in the field of education like school performance, school climate, socio economic status and a programme for junior college students.

The researcher also came across various studies conducted abroad on AQ in the field of education like achievement motivation, programme for VI<sup>th</sup> students, gender, private school teachers, public school teachers, parents of normal children and parents of special children, mathematics achievement and academic performance. The other studies were all conducted in the management field.

Thus the investigator has presented all the studies she could come across so far, in India and abroad, in chronological order, in order to emphasis the point that, on the whole, very few studies are available (especially in India) in the field of Adversity Quotient<sup>®</sup> and no programme was prepared for Std VIII<sup>th</sup> students. Thus the review of related literature helped the researcher to gain insight in this field and move further.

# CHAPTER 3

## RESEARCH DESIGN

### 3.1 Prologue

“Research is voyage of discovery”

Research is the systematic process of collecting and analyzing information in order to increase the understanding of the phenomenon about which we are concerned or interested. It is an attempt at seeking answers to meaningful questions about events, processes or phenomena through the application of the scientific method. It is derived from the French word ‘recherché’ which means ‘to seek again’. It is a scientific and systematic search for pertinent information on a specific topic. Research as an academic activity comprises – defining and redefining problems, formulating hypothesis; collecting, organizing and evaluating data; making deductions and reaching conclusions.

The steps involved in research are as follows –

1. Identifying the Gap in Knowledge
2. Identifying the Antecedent / Causes
3. Stating the Goals
4. Formulating Hypotheses
5. Collecting Relevant Information
6. Testing the Hypotheses
7. Interpreting the Findings
8. Comparing the Findings with Prior researchers’ Findings
9. Modifying Theory
10. Asking New Questions (Pandya, 2010).

The present chapter elaborates the method, details of research design, sample and tools used in the present study.

### **3.2 Research Design and its Utility**

A research design is like a roadmap—the researcher can see where he currently is, where he wants to be at the completion of his journey, and can determine the most efficient and effective route to take to get to his destination.

A good research design will ensure that the evidence obtained enables to answer the initial question as unambiguously as possible. It will typically include how data is to be collected, what instruments will be employed, how the instruments will be used and the intended means for analyzing data collected. Thus, research design is the blueprint of research.

According to Kerlinger "Research design is the plan, structure and strategy of investigation conceived so as to obtain answers to research questions and to control variance." This includes three important terms-plan, structure and strategy.

The plan is the outline of the research scheme on which the researcher is to work. The structure of the research work is a more specific scheme and the strategy suggests how the research will be carried out i.e. methods to be used for the collection and analysis of data. In brief, it is the specification of methods and procedures for acquiring the information needed for solving the problem.

#### **Importance/ Utility of Research Design**

1. Research design is important as it prepares proper framework within which the research work/activity will be actually carried out.
2. Research design acts as a blue print for the conduct of the whole research project.
3. It introduces efficiency in investigation and generates confidence in the final outcome of the study.
4. Research design gives proper direction and time-table to research activity.

5. It keeps adequate check on the research work and ensures its completion within certain time limit.
6. It keeps the whole research project on the right track.

Research design includes methodology of the study, sample, tools of data collection, data analysis.

### **3.3 Methodologies of Research Design**

The research work can be carried out by using different research methodologies. The method depends upon the nature and purpose of the study undertaken. The methods are broadly classified in 3 main categories-

1. Historical Research
2. Descriptive Research
3. Experimental Research

**1. Historical Research:** It is a systematic process of describing, analyzing, and interpreting the past, based on information from selected primary and secondary sources, and relating to the topic under present study. Thus it provides basis for understanding the past, provides perspective for decision making and policy formulation and assists in predicting the future.

**2. Descriptive Research:** Descriptive research seeks to provide an accurate description of observations of a phenomenon at a particular point of time. A descriptive study determines and reports the way things are at present. This type of research is the most widely used for getting solutions for research problems. This type of research includes many research methodologies and procedures, such as observations, surveys, self-reports, and tests. Examples of descriptive research are surveys, case studies, documentary analyses, developmental studies, co-relational studies.

**3. Experimental Research:** Experimental research provides the opportunity to identify cause-and-effect relationships between independent and dependent variables. It is the description and analysis of what will occur, under carefully manipulated conditions. Experimental research provides a method of hypothesis testing. Hypothesis is the heart of experimental research. The researcher first defines a problem and then proposes a tentative answer to the problem or hypothesis. After that the researcher has to test the hypothesis and confirm or disconfirm it on the basis of the controlled variable relationship. An experimental research is characterized by- manipulation, control, observation and replication.

In research the following categories of experimental research designs are popular-

1. Pre-experimental research design.
2. True experimental research design.
3. Quasi experimental research design.

For the present study the researcher has selected the Quasi experimental research design.

### **3.4 Methodology of the Study**

The present study aimed at development of a programme for enhancing Adversity Quotient of standard VIII students. For that purpose experimental research method was employed. The researcher choose the quasi experimental research design as no randomization procedures were used to assign students to a group or exercise full control over the scheduling of experimental conditions and in that the Pre-test, Post-test Non-Equivalent Group Design' was thought appropriate as regular class

schedule could not be disturbed. Intact classrooms were selected for control and experimental groups. . The design can be denoted by –

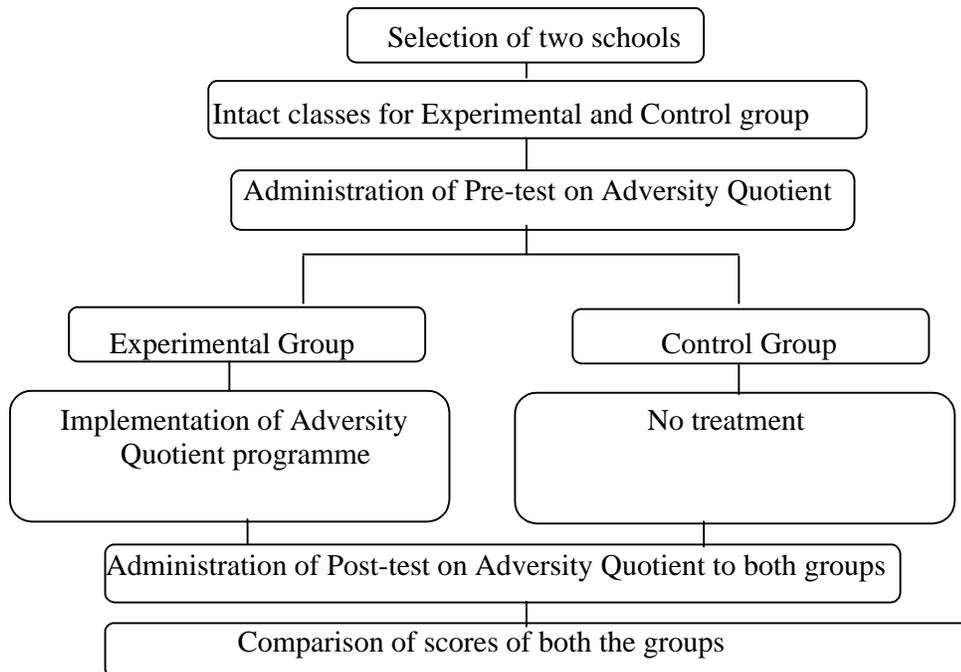
$O_1 X O_2$

$O_3 C O_4$

Where,

$O_1 O_3 =$ Pretests $O_2 O_4 =$ Posttests $X =$ Treatment group $C =$ Control group
---

The researcher here first has to select 2 intact groups keeping in mind the internal validity and external validity to make the groups similar. Then pre-test is given to both groups, after which the researcher provides treatment in the form of program developed by the researcher to the experimental group. After completion of the program the post test is provided to both the groups. There is statistical calculation done for comparison of pretest and posttest to ascertain the enhancement of the programme implemented. The design is represented in the following flowchart -



**Figure 3.1 Pre-test, Post-test Non-Equivalent Group Design**

### 3.5 Sampling

According to Merriam –Webster dictionary, sampling is defined as “the act, process, or technique of selecting a representative part of a population for the purpose of determining parameters or characteristics of the whole population”. This is the next step after the selection of methodology which leads the research further.

A sample design is a definite plan for obtaining a sample from a given population. It refers to the technique or the procedure the researcher would adopt in selecting items for the sample. Sample design is determined before data are collected. After completion of data collection the researcher draws inferences and makes generalizations which are valid and can be applied to the whole population.

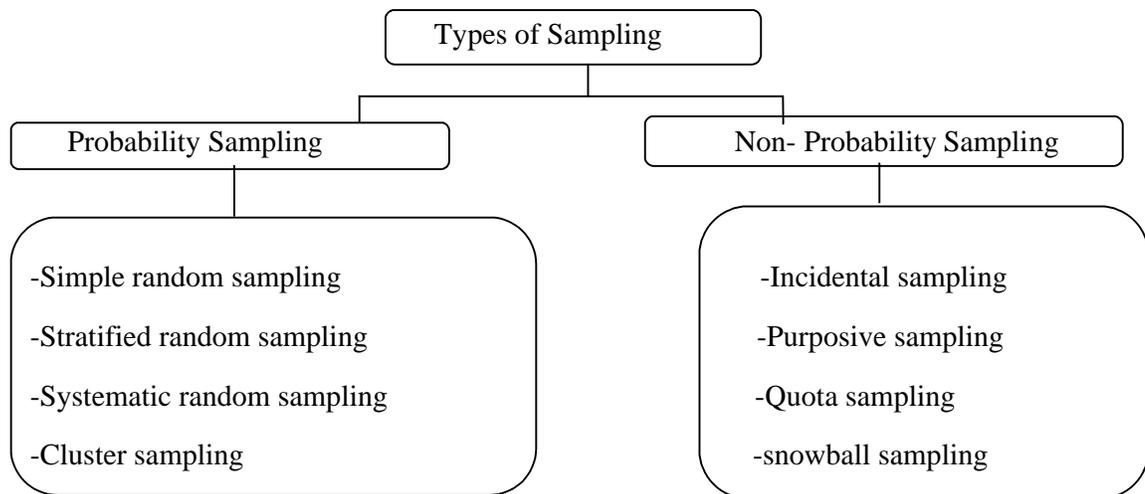
#### TYPES OF SAMPLING

Types of sampling can be broadly classified into two categories-

1. Probability sampling
2. Non- probability sampling

**Probability sampling** - Probability sampling is a sampling technique where the samples are gathered in a process that gives all the individuals in the population equal chances of being selected.

**Non- probability sampling**- Non-probability sampling is a sampling technique where the samples are gathered in a process that does not give all the individuals in the population equal chances of being selected.



**Figure 3.2 Types of Sampling**

**Sampling Technique used for Present Study**

For the present study, the researcher has used the non-probability type of sampling technique from which the incidental sampling was chosen for selecting of sample. The researcher took the group as it was made available by the principal of the schools; there was no choice to be made. Thus, the researcher had to depend on the principals of the school for selection of sample.

**Sample, Size and Nature**

A sample of 53 students in experimental group and 37 students in control group have been chosen from 2 English medium S.S.C schools, namely Friends cooperative Education society Ltd and Lokmanya Tilak English Medium school of Mulund, District Mumbai, respectively.

**School selection**

The Adversity Quotient<sup>®</sup> programme was designed for the standard VIII students. As the research design was pretest post test non equivalent group design, two schools from same area were selected by incidental sample.

**Student selection**

In the present study, incidental sample was selected. Present study intended to study Adversity Quotient<sup>®</sup> of standard VIII students of control and

experimental group, for which the researcher would have to depend on the permission of the school principal. Thus, the intact classes made available by the school authorities were considered as the sample.

After selection of sample the tool has to be administered on the groups for conducting of the research.

### **3.6 Tools of Data Collection**

For testing of hypothesis data has to be collected with the help of a standardized tool. A researcher will require many data-gathering tools or techniques that may vary in their complexity, design, administration and interpretation. The research design helps the researcher in selecting the tool or sometimes the researcher has to prepare a tool and get its reliability and validity checked by experts and then implement it. There are four major techniques of data collection –

- Questionnaire
- Rating scale
- Attitude scale
- Tests

For the present study, a readymade online rating scale was used to administer on the students for the data collection.

### **3.7 Description of Tool used for Data Collection**

The tool used by the researcher for the present study is Adversity Quotient Profile<sup>®</sup> which measures the Adversity Quotient<sup>®</sup> of an individual. It is the most robust instrument in existence for assessing resilience – the capacity to respond constructively to adversity and challenges of all sorts. Adversity Quotient<sup>®</sup> is about how one responds to life's challenges. It is a gauge or a measure to respond and deal with everything, from everyday hassles to the big adversities that life can spring up.

The Adversity Quotient Profile<sup>®</sup>, version 8.1 on-line profiler is a tool with 14 scenarios. Each scenario is a self rating questionnaire, followed by four

questions to be responded on a 5 point bipolar scale, only ten of which are actually scored. Each of the four questions represents and is scored on a different dimension. The respondent has to imagine that the event is happening in real and thereafter, fill the profile. The sum of the four dimensions gives a person's Adversity Quotient<sup>®</sup>. The four dimensions of Adversity Quotient<sup>®</sup> are Control, Ownership, Reach and Endurance. Each of these scale measures a different aspect of AQ<sup>®</sup>, and the score on each scale of the Adversity Quotient Profile<sup>®</sup> can range from 10 to 50, while the total AQ<sup>®</sup> scores can range from 40 to 200.

### **Reliability of the tool**

The AQ Profile<sup>®</sup> has been tested across respondents from 51 countries and has demonstrated strong universality and applicability across cultures. The AQ<sup>®</sup> score and all four sub-scores were found to have high reliabilities by the founder of Adversity Quotient<sup>®</sup>. The Cronbach's co-efficient alphas---a measure of the internal- consistency reliability of each scale score, estimated by the founder are stated below:

#### **Coefficient Alpha Reliabilities (N=1743)**

<b>Scale</b>	<b>Cronbach <math>\alpha</math></b>
<b>Control</b>	<b>0.82</b>
<b>Ownership</b>	<b>0.83</b>
<b>Reach</b>	<b>0.84</b>
<b>Endurance</b>	<b>0.80</b>
<b>TOTAL AQ</b>	<b>0.91</b>

(Source: [http://www.peaklearning.com/about\\_aq-profile\\_technical-data\\_stats.php](http://www.peaklearning.com/about_aq-profile_technical-data_stats.php))

### **Interpretation of the tool:**

AQ<sup>®</sup> scores range from 40 to 200, with a global mean of 154. Those scoring 178 to 200 was construed to have a high AQ<sup>®</sup> while those scoring in the range of 161 – 177 had moderately high AQ<sup>®</sup>. Respondents scoring 135 –

160 were construed to have a moderate AQ<sup>®</sup> while those scoring in the range of 118 – 134 had moderately low AQ<sup>®</sup>. Those who score less than 118 are low on their AQ<sup>®</sup>.

### **3.8 Data Collection**

For the present study the data collection was undertaken in the following steps by the researcher:

- Prior permission was sought by the researcher from two English medium schools of Mulund (west), Mumbai city to conduct the pretest. The permission was granted and the Adversity Response Profile<sup>®</sup> was administered to standard VIII students of both schools.
- The researcher then sought permission from principal of Friends cooperative Education society Ltd to conduct the developed programme and the permission was granted.
- The researcher implemented the programme in the month of February
- The posttest was administered on both groups i.e on experimental group and control group after completion of programme.

After this, analysis of data was done.

### **3.9 Data Analysis**

Data is an aspect of knowledge. It is about what is going on, what is going to happen and how this is changing over time. Analysis of data is interpretation of the data collected by applying statistical techniques to generalize the research hypothesis. The data analysis can be interpreted in-

1. Qualitative data
2. Quantitative data

The steps of analysis of data are as follows-

1. Determining unit of analysis

2. Data preparation
3. Descriptive data analysis
4. Inferential data analysis
  - Parametric technique
  - Non- parametric technique

For the present study, the parametric technique of Analysis of covariance was used for statistical inferences to reach to conclusions of the research.

### **3.10 Technique of Data Analysis**

For the present study, the researcher has used the ‘ANCOVA’ statistical technique, to analyze the data. ANCOVA (Analysis of Co- Variance) represents an extension of the ‘Analysis of Variance’, which tests the significance of difference between means of final experimental data by taking into account the correlation between the dependent variable and one or more co-variants or pertinent control variables, by adjusting initial mean differences in the groups. It is especially useful to the researcher, when for various reasons it is not possible or is quite difficult to equate experimental and control group or some pertinent variable at the start of the experiment (Koul, 2007).

### **3.11 Epilogue**

Thus it can be concluded that without the research design the boat of research cannot start sailing to reach its goal. The research will proceed only with a proper research design; a good design is the heart of the research. The researcher intends to reach the goal of enhancing AQ<sup>®</sup> of the students by using the above mentioned research design.

## **CHAPTER FOUR**

### **DEVELOPMENT OF ACTIVITIES AND THEIR IMPLEMENTATION**

“Education is not preparation for life, education is life itself” – John Dewey.

#### **4.1 Prologue:**

Adversity Quotient<sup>®</sup> plays an important role in the life of a human being. Adversities are going to be part and parcel of every human being, no man will be parted by adversity. According to Dr. Stoltz, the number of adversities an individual faces, during a day, on an average has increased from 7 to 23, in the past ten years and it will keep on increasing. The need arises here to have a high Adversity Quotient<sup>®</sup> to face the adverse situation and move on. The same is with the students, even they are facing enormous number of adversities like in academics, at home, with peer group, the financial problems, the rate at which the socio-economic status of a person is increasing, the terror attack of 26/11, the illnesses, the climatic changes, the disasters like 26/7 flooding, the economic crisis etc. The list is endless.

In India, the adolescent age group forms 21.4 percent of the total population (National Youth Policy, 2000). The problems reported in India of the adolescent age are crimes, dropping out, substance abuse, suicide, pregnancy, sexual exploitation, gap between the rich and the poor (socio-economic status), vocational problems, career related problems etc. Now, to tackle all these problems is not an easy task for the students. Thus, to make them more strong and capable human beings in this era of globalization, the researcher has come up with a Adversity Quotient<sup>®</sup> programme for the VIII<sup>th</sup> std students. So that, they do not feel left out but lead a optimistic life in future and become successful.

## **4.2 Terminal behaviour of students:**

After completion of the programme the researcher intends to come up with increase in the Adversity Quotient<sup>®</sup> of students. At the end of the programme the students will be able to –

- 1) Define adversity.
- 2) Develop endurance skills to deal with adverse situations.
- 3) Develop control during adversity.
- 4) Courageously face real life situation of adversity.
- 5) Think of solutions to problems of life.
- 6) Develop problem solving skills.
- 7) Take ownership and accountability in adverse situation.
- 8) Cope with the adversities strongly.
- 9) Apply philosophy of others to lead one's self in adverse situation.
- 10) Take wise decisions in adverse situations.
- 11) Think positively in adverse situations.
- 12) Overcome adverse situations and move ahead.

## **4.3 Development of Programme:**

The researcher developed 13 activities to enhance the Adversity Quotient<sup>®</sup> of the school students. The activities were prepared keeping in mind the Std. VIII<sup>th</sup> students.

The rationales for all the activities developed were as follows:

<b>Activity No. 1</b>	
<b>Name of activity</b>	Ice Breaker
<b>Time required</b>	1 period (35 minutes)
<b>Number of students</b>	53
<b>Objectives</b>	<ol style="list-style-type: none"> <li>1. To know each other – student and the researcher.</li> <li>2. To get acquainted with the classroom for further learning.</li> </ol>
<b>Nature of activity</b>	Individual
<p><b>Rationale:</b></p> <p>Ice Breaker is an activity for getting acquainted with the students and it is very important to start with this activity so that the teacher and the student come together and also understand each other. It will help the researcher in forming initial bond for further conduction of activities.</p>	

<b>Activity No. 2</b>	
<b>Name of activity</b>	Never give up
<b>Time required</b>	3 periods (35 minutes each)
<b>Number of students</b>	53
<b>Objectives</b>	<ol style="list-style-type: none"> <li>1. To make students aware of endurance skills in adverse situations.</li> <li>2. To develop control in students during adversity.</li> <li>3. To enable students to face real life situations of adversity.</li> </ol>
<b>Nature of activity</b>	Group
<b>Rationale:</b>	
<p>“Never give up” as it states is a self motivating poem which gives examples of an ant, a diver and the waves and gives the student a push to move ahead in life as the boat crosses the sea facing the ups and downs of the waves. Its central theme of “if you try you will never fail” is passed on to the students. So that, they endure it in their daily life and move on.</p>	

### Activity No. 3

<b>Name of activity</b>	Real life experiences
<b>Time required</b>	2 periods (35 minutes each)
<b>Number of students</b>	53
<b>Objectives</b>	<ol style="list-style-type: none"><li>1. To help students to take ownership of their life in adverse situations.</li><li>2. To help students to develop endurance skills during adversity.</li><li>3. To help students to develop control during adversity.</li></ol>
<b>Nature of activity</b>	Individual

**Rationale:**

“Real life experience” is an activity to bring out the awareness about adverse situation in life the student faced at home, school or in the society. This activity will help the students to understand the meaning of adversity. It will make the students more strong for future adverse situations. It will motivate the students to move ahead and not get depressed or stressed out on the outset of an adverse situation.

#### Activity No. 4

<b>Name of activity</b>	The roots
<b>Time required</b>	3 periods (35 minutes each)
<b>Number of students</b>	53
<b>Objectives</b>	<ol style="list-style-type: none"><li>1. To enable students to develop endurance skills in adverse situation.</li><li>2. To enable students to develop ownership.</li></ol>
<b>Nature of activity</b>	Group
<b>Rationale:</b> <p>“The roots” is a group activity which involves the problems of the peer group. During this activity the students will come to know of adversities their friends are facing and then in turn provide help to their friends to reach to the root of the problem by applying the questions and getting to the answers. The student will gain confidence in one’s self by helping friends to reach out to the root of the problem and then in turn finding solutions to the problem of the peers. It helps the students to gain knowledge of the adversities their peer group is facing and thereby to make decisions which will make them stand boldly and fight bravely with the adversities faced.</p>	

### Activity No. 5

<b>1</b>	Seven Summits
<b>Time required</b>	2 periods (35 minutes each)
<b>Number of students</b>	53
<b>Objectives</b>	<ol style="list-style-type: none"><li>1. To make students more strong in any adversity.</li><li>2. To develop endurance skills in adverse situations.</li></ol>
<b>Nature of activity</b>	Group
<b>Rationale:</b> <p>“Seven Summits” is an activity for making the students aware about what is needed to be strong in any adverse situation. Dr. Paul Stoltz has mentioned about these seven summits in his book. Thus, the students will gain a positive attitude towards the challenges of life and learn to handle the adverse situation optimistically.</p>	

**Activity No. 6**

<b>Activity No. 6</b>	
<b>Name of activity</b>	Go ahead
<b>Time required</b>	2 periods (35 minutes each)
<b>Number of students</b>	53
<b>Objectives</b>	<ol style="list-style-type: none"><li>1. To help students to develop endurance skills.</li><li>2. To help students to cope up with the adversities strongly.</li></ol>
<b>Nature of activity</b>	Group
<b>Rationale:</b>  “Go ahead” is a group activity. In reality when we face adverse situations, we become shattered and start thinking negatively in that situation. This activity will help the students to think optimistically and go ahead in life to become resilient.	

**Activity No. 7**

<b>Name of activity</b>	What bothers you?
<b>Time required</b>	2 periods (35 minutes each)
<b>Number of students</b>	53
<b>Objectives</b>	<ol style="list-style-type: none"><li>1. To develop in the students problem solving skills during adversities.</li><li>2. To develop control during adversities.</li><li>3. To help students think about problems.</li></ol>
<b>Nature of activity</b>	Group

**Rationale:**

“What bothers you?” activity is based on the problem solving method. The students will learn the problem solving skills to handle adverse situations. The students accountability and responsibility will be determined by this activity. Thus, the students will be able to identify problems that bother them and think of solutions positively and optimistically.

**Activity No. 8**

<b>Activity No. 8</b>	
<b>Name of activity</b>	Trouble shooters
<b>Time required</b>	2 periods (35 minutes each)
<b>Number of students</b>	53
<b>Objectives</b>	1. To enable students to lead oneself  in  steps of others in adverse situation.
<b>Nature of activity</b>	Group
<b>Rationale:</b>  “Trouble shooters” is a group activity. The students will apply philosophy of people from history, fiction or current events to solve a problem. This activity will make the students learn the rationale of how famous people reached to solutions and then the students will be able to become resilient, healthy and endure leadership qualities.	

**Activity No. 9**

<b>Name of activity</b>	Learning by cognition
<b>Time required</b>	2 periods (35 minutes each)
<b>Number of students</b>	53
<b>Objectives</b>	<ol style="list-style-type: none"><li>1. To enable students to take decisions on adverse situations.</li><li>2. To enable students to develop endurance skills in adversity.</li></ol>
<b>Nature of activity</b>	Group
<b>Rationale:</b>  “Learning by cognition” is an activity based on a prompt, wherein the students will come across an adverse situation and then they will learn about decision making skills, responding positively to an adverse situation and acting bravely during times of hardships.	

### Activity No. 10

<b>Name of activity</b>	Super idols
<b>Time required</b>	1 period (35 minutes each)
<b>Number of students</b>	53
<b>Objectives</b>	<ol style="list-style-type: none"><li>1. To enable students to define adversity.</li><li>2. To enable students to develop ownership and accountability in adverse situation.</li></ol>
<b>Nature of activity</b>	Group
<b>Rationale:</b> <p>“Super idols” is a group activity based on the idol of inspiration of the student. This is an activity which will inspire the student to think of famous people they have come across and faced adverse situation resiliently and became famous. The students will be able to keep one or tow role models in front of them and lead a positive life.</p>	

**Activity No. 11**

<b>Name of activity</b>	Alive
<b>Time required</b>	2 periods (35 minutes each)
<b>Number of students</b>	53
<b>Objectives</b>	<ol style="list-style-type: none"><li>1. To enable the students to develop ownership during adversity.</li><li>2. To enable the students to develop control during adverse situations.</li><li>3. To make students more endurable in adverse situations.</li></ol>
<b>Nature of activity</b>	Group
<p><b>Rationale:</b> ‘A picture is worth of thousand words’.It is a movie showing activity in which a movie was shown on high adversities person faces in life and how they get along it very bravely and reaches its goal. The students will be strongly inspired by the characters who faced the adverse situation and resiliently reached their goal. The audio visual aid is a very important method for any activity and thus it has a strong impact on the minds of the students.</p>	

<b>Activity No. 12</b>	
<b>Name of activity</b>	Leadership
<b>Time required</b>	1 period (35 minutes each)
<b>Number of students</b>	53
<b>Objectives</b>	<p>1. To enable students to develop endurance skills in adverse situation.</p> <p>2.To enable students to develop accountability for the adverse situation.</p>
<b>Nature of activity</b>	Group
<p><b>Rationale:</b></p> <p>“Leadership” is an activity which imbibes the leadership qualities of making right decisions. The students will be able to make right decisions and show positive attitude towards the odds of life. Thus, leadership will make the students think optimistically in any adverse situation.</p>	

### Activity No. 13

<b>Name of activity</b>	Motivational quotes
<b>Time required</b>	1 period (35 minutes each)
<b>Number of students</b>	53
<b>Objectives</b>	<ol style="list-style-type: none"><li>1. To enable students to define adversity.</li><li>2. To enable students to overcome adversities.</li></ol>
<b>Nature of activity</b>	Individual
<b>Rationale:</b>  “Motivational quotes” are quotes which motivates the person to move ahead in all situations of life. These quotes will help the students to stand and face the adversities that come in life, instead of behaving like cowards. Thus, the students will get motivated and not commit suicides, not take drugs, alcohol etc. but will try to live with the adversities and move ahead.	

#### **4.4 Implementation of Programme:**

- 1) Two schools were selected one was experimental and the other controlled group.
- 2) The school principals permission were sought to conduct the activities in experimental group and to administered pre and post tests on controlled group.
- 3) The objectives for each activity were mentioned by the researcher.
- 4) A pre-test was administered on both the groups.
- 5) A total of 13 activities to enhance the Adversity Quotient<sup>®</sup> were implemented by the researcher on the experimental group.
- 6) The researcher provided proper and clear instructions to the students, before implementing each activity, so that the students understood the clear expectations of the researcher and the way the tasks they were required to do.
- 7) The researcher made careful observations after the implementation of the activities
- 8) The total time required to implement all 13 activities was approximately 12 hours.
- 9) Post-test was administered on both the groups after completion of the programme.

Data collected was analyzed by using statistical techniques and conclusions were drawn.

# CHAPTER FIVE

## ANALYSIS OF DATA

“Everyone has a right to an opinion, but no one has a right to be wrong about the facts.”

- Anonymous

### 5.1 Prologue

Analysis of the data means a study of systematically organized material in order to discover inherent relationship and differences. Thus, the raw data collected has to be quantified, tabulated, arranged, examined closely and interpretations are to be drawn out by use of statistical techniques to make valid generalizations.

Statistical analysis is the mathematical process of gathering, organizing, analyzing and interpreting numerical data and is one of the basic phases of the research process.

For the present study two types of statistical applications are relevant:

1. Descriptive Analysis
2. Inferential Analysis

### 5.2 Descriptive Analysis

Descriptive statistical measures are used to describe characteristics of sample or population in totality. It limits generalizations to the particular group of individuals studied or observed.

For the present study the researcher has applied descriptive analysis to demonstrate the nature of distribution of the scores of the four dimensions of AQ<sup>®</sup> namely:

1. Control

2. Ownership
3. Reach
4. Endurance

of the control and experimental group.

**. Description of the scores of each dimension of AQ<sup>®</sup>**

The formula used for converting mean scores of each dimension into percent mean scores is as follows:

$$\% \text{ Mean} = \frac{(\text{Mean} - \text{lowest score possible})}{(\text{Highest score possible} - \text{lowest score possible})} \times 100$$

The researcher will thus, be able to benefit from the percent mean by showing the range of mean scores on a scale of 0 to 100 thereby enabling the researcher to study and compare the various dimensions of AQ<sup>®</sup> of experimental and control group through graphs. A graph is a good way of presenting the percent means. The magnitude of percent mean scores of the dimensions of AQ<sup>®</sup> can be decided as follows:

<b>Percent Mean</b>	<b>Magnitude</b>
0 - 20	Negligible
21 - 40	Low
41- 60	Moderate
61- 80	High
81-100	Very high

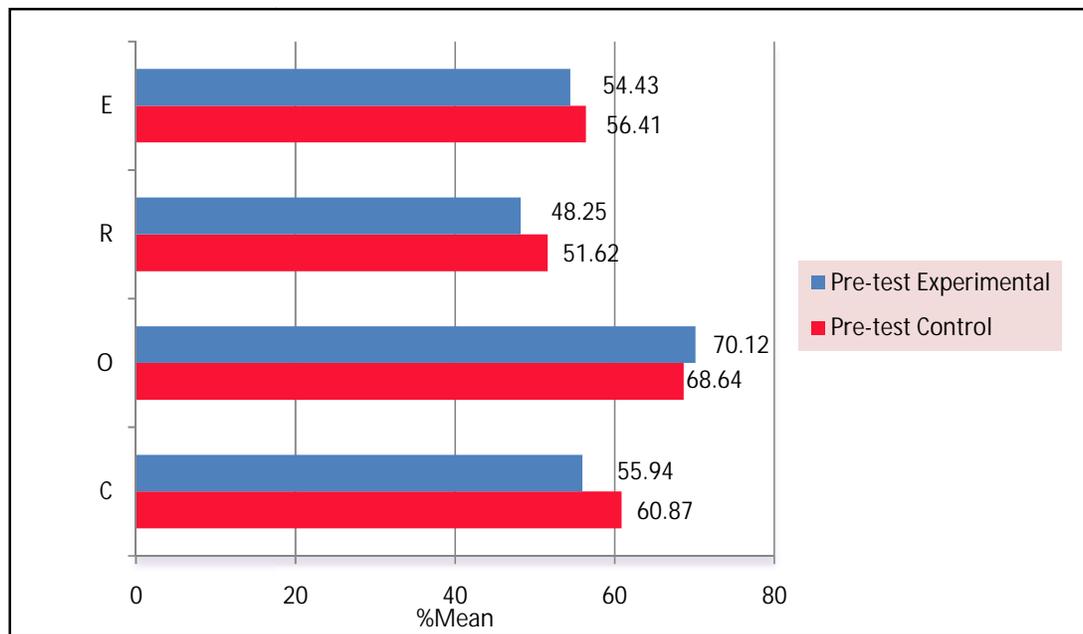
**Table 5.1**

**Description of the Pre-test scores of the AQ dimensions, based on the Percent Mean**

<b>% Mean</b>	<b>C</b>	<b>O</b>	<b>R</b>	<b>E</b>
<b>Pre-test Control Group</b>	<b>60.87</b>	<b>68.64</b>	<b>51.62</b>	<b>56.41</b>
<b>Pre-test Experimental Group</b>	<b>55.94</b>	<b>70.12</b>	<b>48.25</b>	<b>54.43</b>

The graph 5.1 shows the comparison of the pre-test scores of both experimental and control group, in the form of percent mean of each dimension of AQ.

**Graph: 5.1 Pre-test scores of the AQ dimensions, based on the Percent Mean**



From the table 5.1 and graph 5.1, given above, it can be seen that the percent mean value of the pre-test scores on AQ dimensions of Control group are moderate for Reach and Endurance, whereas on Control and Ownership the scores are high. The pre-test scores on AQ dimensions of the experimental group are moderate in percent mean values, except the percent mean of the

Ownership dimension, which is high at 70.12%. Both, Control and Experimental group have scored the most in the dimension of Ownership; at percent mean values of 68.64 and 70.12, respectively.

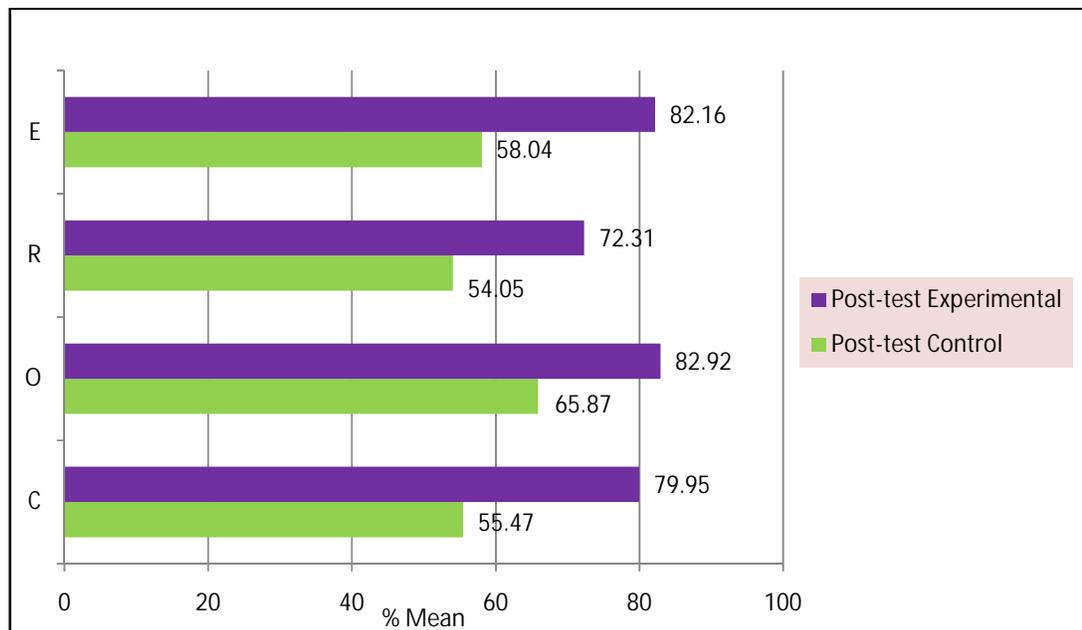
**Table 5.2**

**Description of the Post-test scores of the AQ dimensions, based on the Percent Mean.**

<b>% Mean</b>	<b>C</b>	<b>O</b>	<b>R</b>	<b>E</b>
<b>Post-test Control Group</b>	<b>55.47</b>	<b>65.87</b>	<b>54.05</b>	<b>58.04</b>
<b>Post-test Experimental Group</b>	<b>79.95</b>	<b>82.92</b>	<b>72.31</b>	<b>82.16</b>

The graph 5.2 shows the comparison of the post-test scores of both experimental group and control group, in the form of percent mean of each dimension of AQ<sup>®</sup>

**Graph: 5.2 Post-test scores of AQ dimensions, based on the Percent Mean**



From the table 5.2 and graph 5.2, given above, it can be seen that the percent mean value of the post-test scores on AQ dimensions of Control group is still moderate, whereas the post-test scores on AQ dimensions of the experimental group have shown immense improvement and are now high in percent mean values. Again both, Control and Experimental group have scored the most in the dimension of Ownership, at percent mean values of 65.87% and 82.92%, respectively. The percent mean values of the post-test scores of Experimental group, on each dimension of AQ have shown great improvement due to the implementation of the Programme for enhancing AQ<sup>®</sup>, of students.

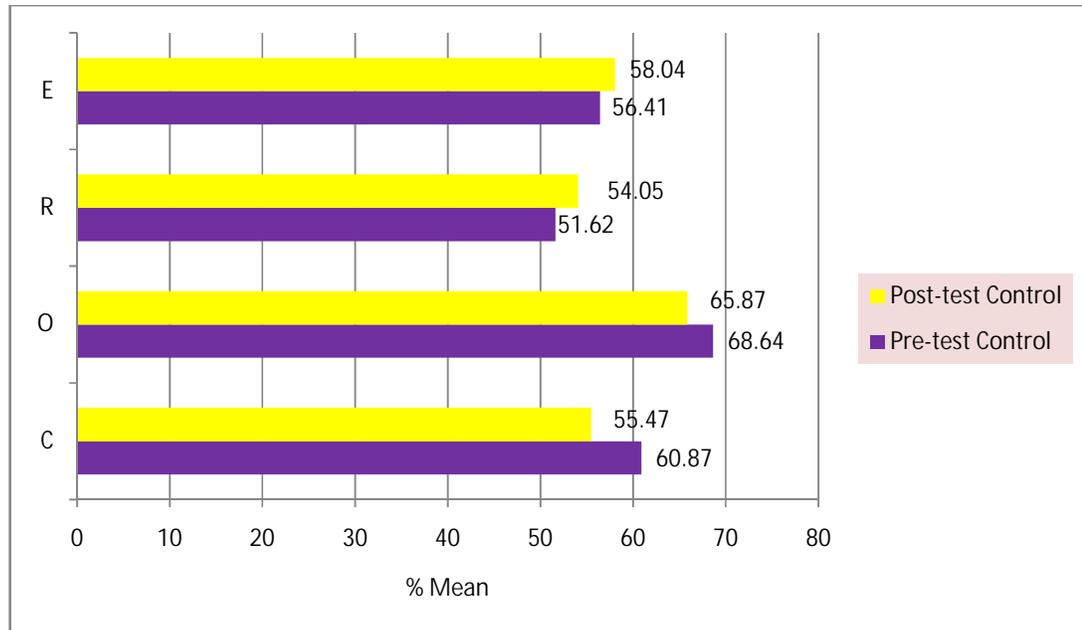
**Table 5.3**

**Description of the Pre-test and Post-test scores of AQ dimensions, of Control Group, based on Percent Mean.**

<b>% Mean</b>	<b>C</b>	<b>O</b>	<b>R</b>	<b>E</b>
<b>Pre-test Control Group</b>	<b>60.87</b>	<b>68.64</b>	<b>51.62</b>	<b>56.41</b>
<b>Post-test Control Group</b>	<b>55.47</b>	<b>65.87</b>	<b>54.05</b>	<b>58.04</b>

The graph 5.3 shows the comparison of the pre-test and post-test scores of the Control group, in the form of percent mean of each Dimension of AQ.

**Graph 5.3 Pre-test and Post-test scores of AQ dimensions, of Control Group, based on Percent Mean**



From the table 5.3 and graph 5.3, given above it can be seen that the pre-test is a little high on dimension of Control and Ownership, whereas the dimensions of Reach and Endurance show a little improvement in the scores of post-test.

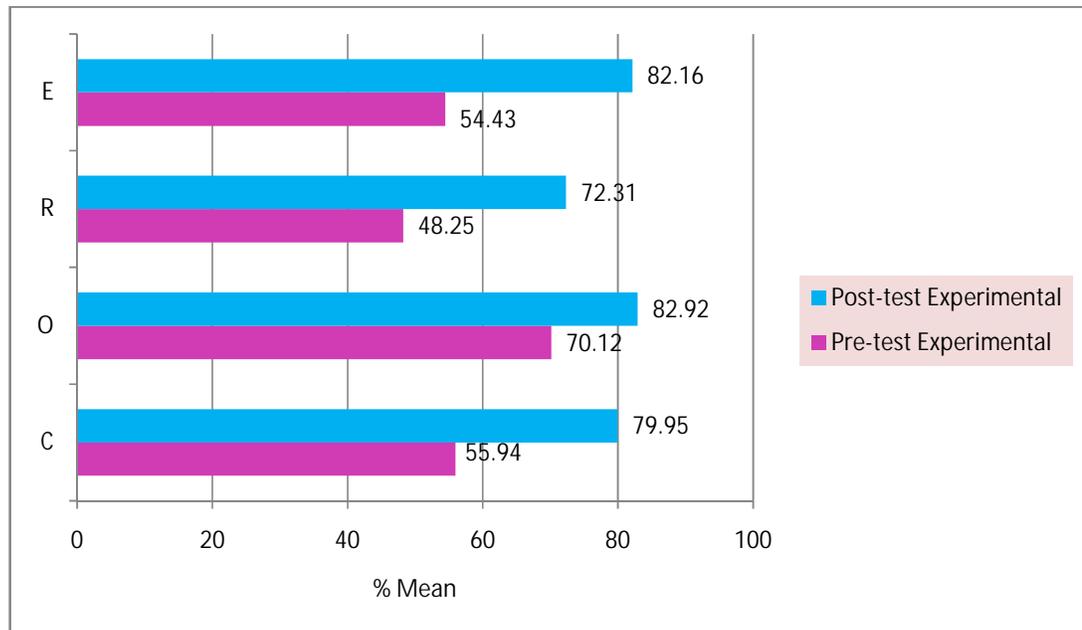
**Table 5.4**

**Description of the Pre-test and Post-test scores of AQ dimensions, of Experimental Group, based on Percent Mean.**

% Mean		C	O	R	E
Pre-test	Experimental	55.94	70.12	48.25	54.43
Post-test	Experimental	79.95	82.92	72.31	82.16

The graph 5.4 shows the comparison of the pre-test and post-test scores of the experimental group, in the form of percent mean of each dimension of AQ :

**Graph 5.4 Pre-test and Post-test scores of AQ dimensions, of Experimental Group, based on Percent Mean.**



From the table 5.4 and graph 5.4 given above, it is clear that the percent mean of the post-test scores on each dimension of AQ, show a drastic improvement. The pre-test scores on dimension of AQ are moderate, but only the Ownership dimension is high in scores. Whereas, the post-test scores of the experimental group, show immense improvement on each dimension of AQ, and are now high at percent mean values.

### 5.3 INFERENTIAL ANALYSIS

Descriptive analysis helps the researcher to describe the properties of the sample while inferential analysis is useful in making valid generalizations about the population from which the sample is drawn.

In any research usually the experiment is conducted on a small sample selected. But researcher is interested to predict about the effect on population at large. Therefore, inferential statistics is to make conclusions regarding outcomes, based on the hypotheses formulated.

#### **5.4 HYPOTHESIS**

Hypotheses are eyes of research problems. They are the intellectual guesses made by the researcher regarding the relationship between variables. According to Best and Kahn “The hypothesis focuses the investigation on a definite target and determines what observations or measures are to be used.” The hypothesis is a powerful tool in research process to achieve dependable knowledge. It helps the researcher to relate theory to observation, and observation to theory. Koul (2011), defines a hypothesis as “a tentative or working propositions suggested as a solution to a problem, and the theory as the final hypothesis which is defensibly supported by all evidence. The final hypothesis which fits all the evidence becomes the chief conclusion inferred from the study.” Thus predicting and explaining the relationship between variables.

For the present study the researcher has formulated, null hypotheses for testing the statistical significance which is a convenient way of testing the hypotheses.

#### **Hypothesis Testing:**

For the present study, the researcher used the ANCOVA statistical technique.

#### **5.5 ANCOVA (Analysis Of Co-Variance)**

In the present study, it was difficult to equate the groups at the being of the experiment. Therefore the researcher used the ANCOVA technique for interpreting inferences.

Following steps were involved in its calculations:

1. Computation of total SS
2. Computation of SS among means
3. Computation of SS within groups
4. Computation of F ratio
5. Computation of adjusted SS for Y i.e,  $SS_{yx}$
6. Analysis of Covariance
7. Computation of Adjusted Y Means
8. Significance of difference among Y Means

Null Hypothesis: There will be no significant difference in the post-test means of AQ<sup>®</sup>, of std VIII<sup>th</sup> students of the experimental and control group.

This was tested by using ANCOVA.

The following table 5.5 shows the means of pre-test and post-test scores in AQ<sup>®</sup>, of both experimental and control group

**Table 5.5**

**The means of pre-test and post-test scores of experimental and control group.**

<b>Test</b>	<b>Experimental</b>	<b>Control</b>
<b>Pre-test</b>	<b>131.07</b>	<b>135.40</b>
<b>Post-test</b>	<b>166.94</b>	<b>132.94</b>

The table 5.6 shows the summary of ANOVA of the pre-test and post-test scores of AQ<sup>®</sup>

**Table 5.6**

**Summary of ANOVA of Pre-test and Post-test scores**

<b>Source of variation</b>	<b>df</b>	<b>SS<sub>x</sub></b>	<b>SS<sub>y</sub></b>	<b>MS<sub>x</sub> (V<sub>x</sub>)</b>	<b>MS<sub>y</sub> (V<sub>y</sub>)</b>
<b>Among Mean</b>	<b>01</b>	<b>408.5</b>	<b>25184.17</b>	<b>408.5</b>	<b>25184.17</b>
<b>Within Group</b>	<b>88</b>	<b>17126.62</b>	<b>15070.73</b>	<b>194.62</b>	<b>171.25</b>
<b>Total</b>	<b>89</b>	<b>17535.12</b>	<b>40254.90</b>		

$$F_x = \frac{408.5}{194.62} = 2.09$$

$$F_y = \frac{25184.17}{171.2} = 147.06$$

**From Table F**

$$df = 1/88$$

**F at 0.05 level = 3.95**

**F at 0.01 level = 6.92**

i.e,  $F_x = 2.09$  so it is not significant at 0.05 level which shows that the experimenter was successful in getting random sample in both the groups.

In the next step, the adjusted SS of y was calculated.

The table 5.7 shows the summary of ANCOVA

**Table 5.7**

**Summary of ANCOVA**

<b>Source of variance</b>	<b>df</b>	<b>SS<sub>x</sub></b>	<b>SS<sub>y</sub></b>	<b>S<sub>xy</sub></b>	<b>SS<sub>yx</sub></b>	<b>MS<sub>yx</sub> (V<sub>yx</sub>)</b>	<b>SD<sub>yx</sub></b>
<b>Among Means</b>	<b>01</b>	<b>408.5</b>	<b>25184.17</b>	<b>- 3207.48</b>	<b>27761.8</b>	<b>27761.8</b>	
<b>Within Groups</b>	<b>87</b>	<b>17126.62</b>	<b>15070.73</b>	<b>8388.04</b>	<b>10962.56</b>	<b>126</b>	<b>11.22</b>
<b>Total</b>	<b>88</b>	<b>17535.12</b>	<b>40254.90</b>	<b>5180.56</b>	<b>38724.36</b>		

$$F_{yx} = \frac{27761.8}{126} = 220.33$$

**From table F**

$$df = 1/87$$

**F at 0.05 level = 3.95**

**F at 0.01 level = 6.92**

From the above table it is clear that  $F_{yx}$  is highly significant far beyond the 0.01 level (F at 0.01 level = 6.92) i.e, after correcting the variability in initial scores of the two final means, they differ significantly. Hence, the null hypothesis is rejected. There is a significant difference in the AQ<sup>®</sup> scores of experimental group.

To find out the significance in the difference among the adjusted post-test means the next step is applied.

The following table 5.8 shows calculation of the adjusted post-test means.

**Table 5.8**

**Adjusted Post-test means**

<b>Groups</b>	<b>N</b>	<b>M<sub>x</sub></b>	<b>M<sub>y</sub></b>	<b>M<sub>yx</sub> (adjusted)</b>
<b>Control</b>	<b>37</b>	<b>135.40</b>	<b>132.94</b>	<b>131.91</b>
<b>Experimental</b>	<b>53</b>	<b>131.07</b>	<b>166.94</b>	<b>167.98</b>
<b>General Means</b>		<b>133.24</b>	<b>149.94</b>	<b>149.94</b>

Significance of difference Among Adjusted post-test means was tested by applying t test.

**Table 5.9**

**Significance of difference among Adjusted Post-test means**

<b>Groups</b>	<b>Adjusted Means</b>	<b>SE<sub>D</sub></b>	<b>Calculated t</b>	<b>Level of Significance</b>
<b>Control</b>	<b>131.91</b>	<b>1.94</b>	<b>18.59</b>	<b>0.01</b>
<b>Experimental</b>	<b>167.98</b>			

**Tabulated Values of t**

**For df = 87 (Table D)**

**t at 0.05 level = 1.99**

**t at 0.01 level = 2.63**

**Calculated t = 18.59**

**Value of t is significant at 0.01 level.**

Therefore, null hypothesis is rejected at 0.01 level.

## **CONCLUSION**

There is a significant difference in the post-test means of AQ<sup>®</sup>, of Std VIII<sup>th</sup> students, of the Experimental and Control group.

## **5.6 Discussion**

AQ is about thriving back from adversity. The students of VIII<sup>th</sup> class were overwhelmed with the way the activities were taken and they wanted such sessions in future also as this was something that had touched their hearts. This was something different than the regular classes which created interest in them to do the activities. The researcher can now say that the increase in the AQ<sup>®</sup> of the experimental group is due to the implementation of the programme. It was a total different experience for the students from the regular class. They all enjoyed doing the activities as it was a new concept. The topic also interested them as they were initially not knowing about it.

It has been seen in the computation that the null hypothesis is rejected, thus the programme proved to be fruitful on the completion. It can be said that the programme was highly significant in reaching the researchers goal.

## **5.7 Observations done during the implementation of the Programme**

### **1. Ice Breaker**

When the AQProfile<sup>®</sup> was administered the students wanted to know what it was going to measure. Some students were disturbing the class, but then it was brought under control. After this phase, it was observed that the students were reluctant to participate in the ice breaking activity. As the strength of the class was 53 students it took a long time. But still the students showed enthusiasm in introducing their classmates. Some students were doing mischief and teasing their friends.

## 2. Never Give Up

Initially the students hesitated in understanding the activity, but after the handouts of the poem were given out students showed attentiveness during the session. It was not easy to form groups and keep control during the activity. But it was observed that the students got inspired by the poem and gave positive answers to the questions at the end. The question, ‘What should one do to become successful in life?’ turned out to be a fruitful discussion, as the discussion went on and the ideas that emerged were enlightening.

## 3. Real Life Experience

All the students were not ready to write as they felt; they had not faced any adverse situation in life. But after the researcher explained about some adverse situations the students might have faced, the students wrote about their experiences. The students were able to identify the adversities that they had faced and also got motivated by the experiences of their fellow friends wherein they had overcome such situations. The students generally related their academic situations like- parents pressure to study, going to tuitions after school and no time to play and stress related to exams. Some students had mentioned about quarrels at home, grandparents harassing during exams, accident in a vehicle, illness, death of family member, robbery and divorce of parents.

## 4. The Roots

The students showed enthusiasm in this activity, but it was seen that some students were getting drifted away from what the others were doing. They had to be kept under control through some admonitions. The researcher observed that the problem solving skill had developed in some students who were interactively participating in the process.

5. Seven Summits

Students showed less interest during this activity, some read the handouts distributed and also discussed among the groups the seven summits and demonstrated optimistic views on the summit. The researcher observed a drastic change in the students who were interested and now they were even convincing their fellow friends to pay attention. It was amazing to see this change.

6. Go Ahead

Now the students were eager to participate in the activity. The idea of this activity was appreciated by the students. All the students actively took lead in the situations kept in front of them. The solutions presented by the students were among the best. Now the researcher saw change in the students as they were seriously thinking of ways of solution for the situation presented.

7. What Bothers You?

This was a motivational activity, the students interestingly went on and came up with daily problems like getting up early in the morning, teasing by peers, rustling of the leaves, getting scolding's , getting beaten up, lot of home-work, some did not want to write, etc. It was observed that the students had never noted that small things in life were bothering them so much. The students became aware of the adversities which was bothering them. This attempt of the researcher was thanked by the students.

8. Trouble Shooters

It was observed that the students spontaneously got involved and came up with famous names like Gandhiji, Shivaji, Barack Obama, Helen keller, Dr.Ambedkar, etc. Three groups found this act a bit difficult to move ahead, the researcher had to help them. Students responded well during the discussion. Overall there was lot of disturbance.

9. Learning by Cognition

Handouts of the prompt were distributed in each group, while reading and answering the questions the students showed tremendous excitement in answering. The responses presented by students were good and they showed their resilience in the answers presented. Now the students were enthusiastically presenting the activities.

10. Super Idols

The researcher observed that the students were attentive and willingly participating in the activity. This activity made the students understand that adversities are part of life and success can be reached after that. There was lot of discussion during this activity. Students were talking about the famous people like Yuvraj Singh who struggled with cancer, Barack Obama, Dhirubhai Ambani, Lord RAM, etc. The session was very lively.

11. Alive

The students became emotional while seeing the movie. The students were inspired to face the oddest of situations which they had seen in the movie. The students came up with a number of such movies like Black, Taare Zameen Par, 127 Hours etc. which they knew of and made them more resilient to face the hardships of life. They said they would like to see such movies during their school hours.

12. Leadership

The researcher observed that the solution which the students opted for in the leadership activity was the perfect solution and this was due to the other activities performed earlier. The students had acquired the qualities of facing hardships optimistically and reaching to solutions.

### 13. Motivational Quotes

It was observed that all the students showed interest in this activity. They had written very inspiring quotes. Thus, showing the resilience of the students.

After all the above observations it was seen that when the students had been informed that this was the last activity. Few of the students were happy the activities had come to an end, while the others wished that the researcher would come again because they knew that this kind of a training session would surely help them to perform well in their future life. Each student was given a token of appreciation. The researcher thanked the students for their co-operation and wished them all the best for their future. The students in return thanked the researcher profusely.

## 5.8 Suggestion for teachers

- DISCUSSION AND DEBATES

The teachers should keep discussions and debates in class regarding AQ<sup>®</sup> related topics to improve the AQ<sup>®</sup> of students which is the need of the Hour.

- WORKSHOPS AND SEMINAR

The principal can organize workshop and seminar on AQ<sup>®</sup> for teachers, students and parents to make them aware of AQ<sup>®</sup> and also improve it for facing the adversities of life positively.

- TELL STORIES OF RESILIENT PEOPLE

The teacher should keep sessions where in the students come to know of people who have faced adverse situations and come up in life to be successful.

- ACT AS A COUNSELLER

Teachers can help students with guiding them in their problems by acting as a counselor to them.

- **USE PROBLEM SOLVING METHOD**

Teachers can use problem solving method in their teaching so that students take decisions in life for future optimistically.

- **SHOW ADVERSE SITUATION MOVIES**

Teachers should keep showing movies related to adverse situation so that students become resilient to life's adverse situation.

- **KEEP EXPERTS TALK**

Experts can be called from different fields to give motivational talk to students, to keep them moving in life and acquire the qualities needed to be agile.

- **TEACH MOTIVATIONAL SONGS AND POEMS**

During the assembly motivational songs can be sung and poems related to adversity can be taught to students. This will help the students to behave positively and optimistically in such situations.

- **PROJECT WORK**

Subject related teachers should give project work to students on adverse situation in that subject to bring that knowledge to students like in geography- different disasters related, in history – about famous people, in science – related to illness and so on.

- **PROGRAMME FOR PARENTS**

A programme for parents can be developed and implemented so that they come to know of the adversities students are facing and help them to cope with those situations.

- **GAMES AND ACTIVITIES**

Games and activities make the students learn about winning and losing, this will also help them to become resilient.

- **READING ARTICLES FROM NEWSPAPER**

Articles showing adverse situations should be read out and discussed with the students to help them to reach to solutions.

- **BULLETIN BOARDS**

Motivational sayings should be written on the bulletin boards to motivate students to face hardships strongly and boldly.

## **5.9 Suggestions for further Research**

Further research can be conducted in the field of education on AQ<sup>®</sup> for making resilient human beings:

1. A programme can be developed for secondary school Teachers to enhance AQ<sup>®</sup>.
2. Research can be conducted to compare AQ<sup>®</sup> of teachers of different levels of education.
3. Research can be conducted to study the relationship between AQ<sup>®</sup> and achievement motivation of secondary school students.
4. Research can be conducted to compare the AQ<sup>®</sup> of teachers from different boards.
5. An explanatory study on AQ<sup>®</sup>, Home environment and School environment of secondary school students can be conducted.
6. A programme can be developed to enhance AQ<sup>®</sup> of B.Ed students.

7. Research can be conducted to study the relationship between AQ<sup>®</sup> and Personality of teachers.

8. Research can be conducted to study the relationship between AQ<sup>®</sup> and teacher performance.

# CHAPTER SIX

## SUMMARY

Education is not the learning of facts but the training of the mind to think.

-Albert Einstein

### 6.1 Prologue

Today a student faces many difficulties in his daily life. He has to develop his strengths to handle these difficulties. As quoted above Gandhiji has put down what strength is. According to Gandhiji when a person faces the hardships and goes on, then it is strength and it does not mean always winning. Thus, a student comes across many problems, it may be related to academics, home environment, socio-economic situations, identity crisis, relations with peers, physical, emotional, social and intellectual which can lead the student to dropping out of schools, suicides, acquisition of bad habits, substance abuse, violence, depression, stress, anxiety disorder, accident, altruism, homicide etc. Thus resulting in creating hardships for the students.

The globalization and urbanization has lead to a lot of challenges in front of the students. Today's students need to understand that only becoming successful in academics is not important, the student has to learn to handle the hardships that may come across in life. Thus the student can be termed as successful.

According to Dr. A. P. J. Abdul Kalam, "Any task you do you have to come across problems, problems should not become captain of the individual, but the individual should become the captain of the problem, defeat the problem and succeed"

Success is desired by everyone, it can be you, me or any person, but very few people become successful. The one's who became successful had to face many adversities, not only did they face it; they even overcame it and lead

a successful life. Thus, this struggle against adversity is always going to be there even after leaving school i.e. at the stage of graduation/ post graduation, the place of work, after marriage, after having kids and also in their old age. No person moves ahead without facing adversities, as a child the adversities faced are different; they keep on changing with age, time and place. Dr. Paul Stoltz says “Each child must develop the ability to turn obstacles into opportunities for which Adversity Quotient<sup>®</sup> is the word of the hour.”

## **6.2 Need of the Study**

Initially IQ was only considered for success of an individual in education. As years passed by then came the EQ and then these two were considered for the success of an individual. But these only measure your knowledge and ability to cope emotions. Do these make the individual successful? The answer is “No”. Individuals also face adverse situations in life and if these adversities are overcome then a person is considered successful.

The researcher feels that students face lot of adversities like high stress level during exams, group conflicts, child abuse, parental pressures, competition, financial problems, status problems, identity crisis, failure in exams, low self esteem, etc. which leads the student to dropping out of schools, suicides, acquisition of bad habits, substance abuse, violence, depression, stress, anxiety disorder etc.

Adolescents are a positive resource for the country. Adolescent at the same time is a critical period for the development of self identity. The problem age is, between 11 to 14 years during which they face physical, social, emotional and intellectual problems.

The researcher feels the need to make the students of standard VIII<sup>th</sup> aware of coping with the adversities they are facing or going to face in latter period of life. So that, they will overcome the adversities and become good citizens in the era of knowledge explosion, technological advancement and globalization. The researcher also feels that as in the coming years the students

will pass out and move to higher classes which will bring parental pressure in academics and also the other physical changes that they are going to cope with, require high AQ<sup>®</sup>. Thus, for these reasons researcher developed a programme for the students to strengthen their AQ<sup>®</sup> for dealing with the adversities that they will be facing in the coming years.

### **6.3 Statement of the Problem**

Development of a Programme for Enhancing Adversity Quotient<sup>®</sup> of Std VIII<sup>th</sup> Students.

### **6.4 Variables of the Study**

- Independent variable – Programme
- Dependent variable – Adversity Quotient<sup>®</sup>

### **6.5 Operational Definitions**

#### **Adversity Quotient**

Adversity Quotient can be defined as the science of human resilience. It is a method of measuring and strengthening resilience (Stoltz, 1997).

#### **Adversity Quotient Profile**

Adversity Quotient Profile is a self rating scale which describes pattern of response to adversity with –

##### **Control**

It measures the degree of control that a person perceives over adverse events. It is a strong gauge of resilience and health.

##### **Ownership**

It measures the extent to which a person holds himself or herself accountable for improving a situation. It is a strong gauge of accountability and likelihood to take action.

### **Endurance**

It is the perception of time over which good or bad events and their consequences will last or endure. It is a strong gauge of hope or optimism.

### **Reach**

It is the perception of how large or far reaching events will be. It is a strong gauge of perspective burden and stress level.

### **Programme**

The programme refers to the development of set of activities for enhancing the AQ of students.

### **Effectiveness of the programme**

It is the gain in the post test scores of AQ of experimental group students.

## **6.6 Objectives of the Study**

1. To develop the programme for enhancing the AQ of standard VIII<sup>th</sup> students.
2. To study the effectiveness of the developed program.

## **6.6 Hypothesis**

The researcher had formulated a null hypothesis for the following study which was -

- There will be no significant difference in the post-test means of AQ of standard VIII<sup>th</sup> students, of the experimental and control group students.

## **6.8 Scope and Delimitations**

1. The present study was confined on standard VIII<sup>th</sup> students only.
2. The study was restricted to English medium schools only.
3. The study was confined to S.S.C board schools (Mulund – West).
4. The study was limited to Mumbai city.

## **6.9 Sample and its Selection**

A sample of 53 students in experimental group and 37 students in control group have been chosen from 2 English medium S.S.C schools, namely Friends cooperative Education society Ltd and Lokmanya Tilak English Medium school of Mulund, District Mumbai, respectively.

### **School selection**

The Adversity Quotient programme was designed for the standard VIII students. As the research design was pre-test post-test non equivalent group design, two schools from same area were selected by incidental sample.

### **Student selection**

In the present study, incidental sample was selected. Present study intended to study Adversity Quotient of standard VIII students of control and experimental group, for which the researcher would have to depend on the permission of the school principal. Thus, the intact classes made available by the school authorities were considered as the sample.

## **6.10 Data Gathering Tool**

The Adversity Response Profile<sup>®</sup>, version 8.1 on-line profiler is a tool with 14 scenarios. Each scenario is a self rating questionnaire, followed by four questions to be responded on a 5 point bipolar scale, only ten of which are actually scored. Each of the four questions represents and is scored on a different dimension. The respondent has to imagine that the event is happening in real and thereafter, fill the profile. The sum of the four dimensions gives a person's Adversity Quotient<sup>®</sup>. The four dimension of Adversity Quotient<sup>®</sup> are Control, Ownership, Reach and Endurance. Each of these scale measures a different aspect of AQ<sup>®</sup>, and the score on each scale of the Adversity Response Profile<sup>®</sup> can range from 10 to 50, while the total AQ<sup>®</sup> scores can range from 40 to 200.

### **6.11 Methodology of the Study**

The methodology used for the present experimental study was the Quasi Design, Pre-test, Post-test Non-Equivalent Group Design. A programme was developed by the researcher for enhancing the AQ<sup>®</sup> of students, on the basis of the objectives determined for the same. The prepared activities were assessed by experts for validity. A pre-test was administered to the students of both the groups, namely experimental and control group, by providing them the AQ profile<sup>®</sup>. The programme was implemented on the experimental group only. The same post-test was administered, after completion of the programme, to both the groups.

### **6.12 Data Analysis**

The data was analyzed by the researcher descriptively and inferentially. In descriptive analysis the researcher calculated the Percent Mean of each dimension of AQ<sup>®</sup>, scored on the AQ<sup>®</sup> Profile, namely Control, Ownership, Reach and Endurance. Bar Graphs were used to show the differences. In inferential analysis the researcher tested the null hypothesis using the Non-Parametric statistical technique of ANCOVA (Analysis Of Co-Variance) and appropriate inferences were revealed.

### **6.13 Epilogue**

There is a significant difference in the post-test means of AQ<sup>®</sup>, of standard VIII<sup>th</sup> students, of the experimental and control group.

### **6.14 Suggestions for Teachers**

- **DISCUSSION AND DEBATES**

The teachers should keep discussions and debates in class regarding AQ<sup>®</sup> related topics to improve the AQ<sup>®</sup> of students which is the need of the hour.

- **WORKSHOPS AND SEMINAR**

The principal can organize workshop and seminar on AQ<sup>®</sup> for teachers, students and parents to make them aware of AQ<sup>®</sup> and also improve it for facing the adversities of life positively.

- **TELL STORIES OF RESILIENT PEOPLE**

The teacher should keep sessions where in the students come to know of people who have faced adverse situations and responded positively to move ahead in life to be successful.

- **ACT AS A COUNSELLER**

Teachers can help students with guiding them in their problems by acting as a counselor to them to improve their AQ<sup>®</sup>.

- **USE PROBLEM SOLVING METHOD**

Teachers can use problem solving method in their teaching so that students take decisions in life for future optimistically.

- **SHOW ADVERSE SITUATION MOVIES**

Teachers should keep showing movies related to adverse situation so that students become resilient to life's adverse situation.

- **KEEP EXPERTS TALK**

Experts can be called from different fields to give motivational talk to students, to keep them moving in life and acquire the qualities needed to be agile.

- **TEACH MOTIVATIONAL SONGS AND POEMS**

During the assembly motivational songs can be sung and poems related to adversity can be taught to students. This will help the students to behave positively and optimistically in such situations.

- **PROJECT WORK**

Subject related teachers should give project work to students on adverse situation in that subject to bring that knowledge to students like in geography- different disasters related, in history – about famous people, in science – related to illness and so on.

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- **GAMES AND ACTIVITIES**

Games and activities make the students learn about winning and losing, this will also help them to become resilient.

- **READING ARTICLES FROM NEWSPAPER**

Articles showing adverse situations should be read out and discussed with the students to help them to reach to solutions.

- **BULLETIN BOARDS**

Motivational sayings should be written on the bulletin boards to motivate students to face hardships strongly and boldly.

### **6.15 Suggestion for further Research**

Further research can be conducted in the field of education on AQ<sup>®</sup> for making resilient human beings:

1. A programme can be developed for secondary school teachers to enhance AQ<sup>®</sup>.
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5. An explanatory study on AQ<sup>®</sup>, Home environment and School environment of secondary school students can be conducted.
6. A programme can be developed to enhance AQ<sup>®</sup> of B.Ed students.

7. Research can be conducted to study the relationship between AQ<sup>®</sup> and Personality of teachers.

8. Research can be conducted to study the relationship between AQ<sup>®</sup> and teacher performance.

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## APPENDIX – A

### List of Experts

1. Dr. Pradnya Wakpainjan  
Associate Professor, Head of the Department,  
Department of Education,  
S.N.D.T. Women's University,  
Churchgate.  
Mumbai

2. Dr. Pratima Dave  
I/C, Head of the Department,  
Department of Applied Linguistics,  
S.N.D.T. Women's University,  
Churchgate  
Mumbai

3. Dr. Arundhati Chavan  
Assistant Professor,  
College of Education,  
Swayam Siddhi College,  
Bhiwandi.  
District Thane

4. Ms. Archana Almeida  
Assistant Professor,  
Thomas Baptista Junior College,  
Vasai.  
District Thane

## **APPENDIX – B**

### **The Programme**

#### **ACTIVITY 1: ICE BREAKER**

**TIME:**

1 Period (35 minutes)

**OBJECTIVE:**

- To know each other- student and teacher.
- To get acquainted with the classroom for further teaching.

**PROCEDURE:**

- 1) Researcher distributes plain sheet of paper to the students.
- 2) Researcher then instructs the students to write down their name and answer three questions on that sheet
  - your favourite colour
  - your favorite subject
  - your best friends name.
- 3) Researcher then asks the students to fold the sheets and pass in front.
- 4) Researcher then passes them out so everyone has someone else's card.
- 5) Researcher then allows students find the person whose card they have and introduce themselves.

## **ACTIVITY 2: NEVER GIVE UP**

### **TIME:**

3 Periods (35 minutes each)

### **OBJECTIVES:**

- To make students aware of endurance skills in adverse situations.
- To develop control in students during adversity.
- To enable students to face real life situations of adversity.

### **STUDENTS:**

Eight groups of seven students in each group

### **PROCEDURE:**

- 1) Researcher forms eight groups of seven students in each group and selects a group leader.
- 2) Researcher distributes the sheet of the poem in Hindi.
- 3) Researcher gives instruction to the students.
  - To read the poem silently.
  - To read the poem stanza wise.
  - To write the inherent meaning of each stanza by discussing in the group.
  - The group leaders come forward with their list of points.
- 4) Researcher then discusses the gist of the poem stanza wise taking into consideration the points given by each group.
- 5) Researcher distributes a worksheet with 5 questions to each group.
- 6) Researcher asks each group member to read the answers of the questions.

लहरेंसे डरकर नौका पार नहीं होती ।  
कोशिश करनेवालों की कभी हार नहीं होती ॥

नन्हीं चिंटी जब दाना लेकर चलती है ।  
चढती दिवारों पर सौ बार फिसलती है ।  
मजका विश्वास रंगो में साहस भरता है ।  
चढकर गिरना गिरकर चढना न अस्वरता है ।  
मेहनत उसकी बेकार हर बार नहीं होती ।  
कोशिश करनेवालों की कभी हार नहीं होती ॥

डुबकियां सिंधुमें गोताखोर लगाता है ।  
जा जा कर स्वालीहाथ लौटकर आता है ।  
मिलते न सहज ही मोती गहरों पानी में ।  
बढता दूना विश्वास इसी हैरानी में ।  
मुट्टी उसकी स्वाली हरबार नहीं होती ।  
कोशिश करनेवालों की कभी हार नहीं होती ॥

असफलता एक चुनौती है रिवकार करो ।  
वया कमी रह गयी देखो और सुधार करो ।  
जब तक न सफल हो नींद चैन की त्यागो तुम ।  
संधर्षोका मैदान छोड मत भागो तुम ।  
कुछ किये बिना ही जयजयकार नहीं होती ।  
कोशिश करनेवालों की कभी हार नहीं होती ॥

कवी श्रीयुत हरिवंशराय बच्चन ॥

## **HAND- OUT in English**

### **KOSHISH KARNEWALON KI HAAR NAHI HOTI**

#### **- SRI HARIVANSHRAI BACHCHAN**

Lehron se Darkar nauka par nahin hoti,

koshish karne walon ki haar nahin hoti

- Nanhi cheenti jab daana lekar chalti hai,

chadhti deewaron par, sau bar phisalti hai.

Man ka vishwas ragon mein saahas bharta hai,

chadhkar girna, girkar chadhna na akharta hai.

Aakhir uski mehnat bekar nahin hoti,

koshish karne walon ki haar nahin hoti.

- Dubkiyan sindhu mein gotakhor lagata hai,

ja ja kar khali haath lautkar aata hai

Milte nahi sahaj hi moti gehre paani mein,

badhta dugna utsah isi hairani mein.

Muthi uski khali har bar nahin hoti,

koshish karne walon ki haar nahi hoti.

- Asafalta ek chunauti hai, ise sweekar karo,

kya kami reh gayi, dekho aur sudhar karo.

Jab tak na safal ho, neend chain ko tyago tum,

Sangharsh ka maidan chhodkar mat bhago tum.

Kuch kiye bina hi jai jaikar nahin hoti,

koshish karne walon ki haar nahin hoti.

## WORKSHEET

- Q.1 How can the performance of the ant influence one's life?
- Q.2 What does the diver do to get pearl from the sea?
- Q.3 Why should one accept failure according to the poet?
- Q.4 What should one do to become successful in life?
- Q.5 What is the gist of the poem?

### **ACTIVITY 3: REAL LIFE EXPERIENCE**

**TIME:**

2 periods (35 minutes each)

**OBJECTIVES:**

- To help students to take ownership of their life in adverse situations.
- To help students to develop endurance skills during adversity.
- To help students to develop control during adversity.

**ACTIVITY:** Individual activity

**PROCEDURE:**

- 1) Researcher instructs the students to write down their real life experience wherein they faced an adverse situation i.e. at home, in school, in the society etc.
- 2) Researcher distributes a worksheet to students to write “Real life experience”
- 3) Researcher gives 20 minutes to write down “Real life experience”
- 4) Researcher conducts discussion on the following points
  - Who quit the situation Right at the beginning?
  - Who faced the situation initially but left it midway?
  - Who went ahead and reached for a solution in such a situation?
- 5) Researcher then calls upon students who went ahead and reached for a solution to read out their experience.
- 6) Researcher then asks students telling them about these students who overcame the adverse situation and went ahead instead of leaving or staying at that point of adversity.
- 7) Researcher concludes by motivating students to move on in life instead of getting depressed or stressed out at the coming of adverse situation.

## **ACTIVITY 4: THE ROOTS**

### **TIME:**

3 Periods (35 minutes each)

### **OBJECTIVES:**

To enable students to develop endurance skills in adverse situation.

To enable students to develop ownership.

### **STUDENTS:**

8 groups of 7 students in each group

**ACTIVITY:** Group

### **PROCEDURE:**

- 1) Researcher forms 8 groups of 7 students in each group and selects a group leader.
- 2) Researcher instructs students to compile lists of problems their fears face such as poor grades or neighborhood vandalism.
- 3) Researcher gives 15 minutes to compile a list of problems to the students.
- 4) Researcher then instructs students to analyze the problem by asking and answering following questions:
  - Where does the problem occur?
  - When does it occur?
  - How does it occur?
  - To whom does it occur and who causes it?
- 5) Researcher helps students to do this part of activity by moving about and observing to the queries of the students.

- 6) Researcher then concludes the activity by using the Toyota suggestion system and asking why? 4 times for e.g. using the problem of poor grades.
- Why did I receive poor grades in history test?  
(The teacher is a hard grader)
  - Why is the teacher a hard grader?  
(She expects a lot from her student)
  - Why does she expect a lot from her students?  
(She knows we can do it if we study hard)
  - Why does she know we can do it if we study hard?  
(She has seen students like us do it in past)
- 7) Researcher tells students how to reach to a solution in a systematic way and asks students if they will apply these Toyota suggestions in other situations will they get solutions?

## **ACTIVITY 5: SEVEN SUMMITS**

**TIME:** 2 Periods (35 minutes each)

**OBJECTIVE:**

- To make students more strong in any adversity.
- To develop endurance skills in adverse situations.

**STUDENT:**

8 groups of 7 students

**MATERIAL:**

Hand out of seven summits as given by Dr. Paul Stoltz

**PROCEDURE:**

- 1) Researcher forms groups
- 2) Researcher distributes handouts of the Seven summits given by Dr. Paul Stoltz to each group.
- 3) Researcher instructs students to read the Seven Summits in the group and have a discussion.
- 4) The researcher then asks the students if these Seven Summits will help them to become successful in an adverse situation.
- 5) Researcher gives them 20 minutes to discuss.
- 6) Researcher takes rounds and helps students who have queries.
- 7) Researcher after the 20 minutes discussion asks the 7 group leaders to come forward and present their points.
- 8) Researcher discusses all seven summits one by one.
- 9) Researcher asks students if they helped them in overcoming their fears, angriness etc.

## HAND – OUT

### **What are the Seven Summits to Success?**

**Summit 1:** Take It On. Learn how to overcome frustration, helplessness, and anger — and benefit from adversity.

**Summit 2:** Summon Your Strengths. Challenge the conventional wisdom that natural strengths drive success. Exceed expectations of what you and others can, or should, attempt to do.

**Summit 3:** Engage Your CORE. Learn how to handle adversity better and faster. Engage your CORE (the four dimensions that determine how you respond to adversity) and learn how to turn adversities into advantages.

**Summit 4:** Pioneer Possibilities. Devise signature systems for turning the impossible into the possible. Learn to create strategies that others fail to see.

**Summit 5:** Pack Light, Pack Right. Learn how packing poorly cripples you... but how choosing the right things, people, obligations, and pursuits strengthen you. “Spring clean” so you can rise up, rather than crumble, under the weight of adversity.

**Summit 6:** Suffer Well. Character is forged in the flames of adversity. Done right, suffering can fuel greatness.

**Summit 7:** Deliver Greatness, Everyday. This summit, the culmination, weaves together the most important ideas of the book, providing a coherent, portable package of practices that you can apply anywhere, anytime.

## **ACTIVITY 6: GO AHEAD**

### **TIME:**

2 Periods (35 minutes each)

### **OBJECTIVES:**

- To help students to develop endurance skills.
- To help students to cope with the adversities strongly.

### **STUDENTS:**

8 groups of 7students in each group

### **PROCEDURE:**

- 1) Researcher forms 8 groups of 7students in each group and selects a group leader.
- 2) Researcher distributes the sheet having different situations to all groups.
- 3) Researcher instructs the students to read the given situation carefully.
- 4) Researcher then instructs the students to write down on a paper how they will handle the situation.
- 5) Researcher asks each group to read out the facts they had jolted down and discusses how each situation is to be handled to gain a positive outlook towards it.

## HAND OUT OF SITUATIONS

- 1) You are on your way to give a national level exam in a local train and you get late for the exam
- 2) Due to heavy rainfall transportation has stopped and you are in school
- 3) Father has lost his job and there is no money to buy food in the house also and school fees has to be paid
- 4) There are daily quarrels in the house and exams are coming
- 5) You are on field work and there is a bomb blast in that area
- 6) Your house is on 23<sup>rd</sup> floor and the lift is not working when you return from school
- 7) You have met with an accident and lost your right hand
- 8) Your teacher has assigned to prepare a power point presentation and bring next day and your computer is not working

## **ACTIVITY 7: WHAT BOTHERS YOU?**

### **TIME:**

2 Periods (35 minutes each)

### **OBJECTIVES:**

- To develop in the students problem-solving skills during adversities.
- To develop control during adversities.
- To help students think about problems

### **STUDENTS:**

8 groups of 7 students in each group

### **PROCEDURE:**

- 1) Researcher forms 8 groups of 7 students in each group and selects a group leader.
- 2) Researcher asks the students to simply write down answers to the “what bothers you?” question.
- 3) Researcher gives a example to students about “what bothers you?”

#### **EXAMPLE:**

Researcher –When a child gets scolded by his parents. This is what bothers him. In the same way list down problems that bother you.

- 4) Researcher gives them 15 minutes to write down answers to “what bothers you?”
- 5) Researcher then calls upon the group leaders to come forward with their answers one by one and makes them read out the situations one by one and discusses the solution for such situations.
- 6) Researcher asks students if this activity helped them to accept problems, think positively and find solutions.

## **ACTIVITY 8: TROUBLE SHOOTERS**

### **TIME:**

2 Periods (35 minutes each)

### **OBJECTIVES:**

- To enable students to have control in adverse situation.
- To enable students to develop self control during adversity.

### **STUDENTS:**

8 groups of 7 students in each group

### **PROCEDURE:**

- 1) Researcher forms 8 groups of 7 students in each group and selects a group leader.
- 2) Researcher names a problem with which everyone is familiar – How to reduce the number of homeless people on the streets?
- 3) Researcher then assigns each group with a familiar figure from history, fiction or current events and instructs them to determine how that person would have solved the problem.
- 4) Researcher suggests the students to consider what particular expertise the person would bring to the problem and what would be his or her objectives.
- 5) Researcher holds a discussion group by group as how they thought on the problem based on the person assigned and how they reached to a solution.
- 6) Researcher then conducts discussions on how one can pursue philosophy of such person in life.

## **ACTIVITY 9: LEARNING BY COGNITION**

### **TIME:**

2 Periods (35 minutes each)

### **OBJECTIVES:**

- To enable students to take decisions on adverse situations.
- To enable students to develop endurance skills in adversity.

### **STUDENTS:**

8 groups of 7 students in each group

**ACTIVITY:** Group

### **MATERIALS:**

A prompt, a set of 15 questions

### **PROCEDURE:**

- 1) Researcher organises students into small groups of 5 students in each group and selects a group leader.
- 2) Researcher reads out the prompt as given behind and instructs the students to listen carefully.
- 3) Researcher then given 3 questions to each group and asks the students to discuss each question for 5 minutes.
- 4) At the end of the discussion the researcher asks them to choose one of the questions that provoked the most fruitful discussion group wise.
- 5) Researcher calls the leader of each group to make a two minute presentation to the class on what they discussed.
- 6) Researcher concludes with an open class discussion, in response to what they heard from the other groups.

### **HAND – OUT OF PROMPT:**

“The survivor struggled with very different kinds of loss. Ram Manohar lost a son, Asha Devi lost her husband and Himesh Khan was told he’d lost use of one leg, most of his speech and a good deal of his brain. They all lived through it, but in very different ways. Many survivors faced unimaginable, horror; some responded heroically, others poorly. Discuss what you learned?”

### **QUESTIONS:**

- 1) Name five characters you feel acted heroically or overcame a great obstacle?
- 2) What did each person do that impressed you?
- 3) What did you learn from each person?
- 4) Which character faced the greatest challenge?
- 5) Who overcame the most?
- 6) What was their mental response to what they faced?
- 7) Were you surprised by what they achieved?
- 8) How do you think their life might be now if they had approached their situation differently?
- 9) If you faced a similar loss or injury, how would you respond?
- 10) Do you think any character responded poorly to what they faced?
- 11) Name the character who poorly responded?
- 12) Why do you think he responded poorly?
- 13) What do you think the survivors must have done?
- 14) Put yourself into the position of one person you did not admire and think why he / she acted that way?
- 15) Why did some survivors face unimaginable horror?

## ACTIVITY 10: SUPER IDOLS

### TIME:

1 Period (35 minutes)

### OBJECTIVES:

- To enable students to define adversity.
- To enable students to develop ownership and accountability in adverse situation.

### STUDENTS:

8 groups of 7 students in each group

### PROCEDURE:

- 1) Researcher organises groups.
- 2) Researcher instructs students to think of some famous people who have faced adversity and also overcome them.
- 3) Researcher instructs to think on their own of one or two people who have dealt with adversity in their life.
- 4) Researcher puts down 2 questions to be answered.
  - What the adversity is or was?
  - How did that person handle the situation?
- 5) Researcher gives them 10 minutes to think for the answers of these questions.
- 6) Researcher appreciates the work of students and discusses on what the students had come up with.
- 7) Researcher then shows some well-known persons pictures who had faced adversity like Mahatma Gandhi, Albert Einstein , Abhishek Bachchan and Dr. A. P. J. Abdul Kalam.

## ACTIVITY 11: ALIVE

**TIME:**

2 Periods (35 minutes each)

**OBJECTIVES:**

- To enable the students to develop ownership during adversity.
- To enable the students to develop control during adverse situations.
- To make students more endurable in adverse situations.

**STUDENTS:** Pair of two students

**MATERIAL:** A segment of the movie on C.D, handout sheet.

**PROCEDURE:**

- 1) Researcher makes the students sit in pair and puts on the movie “ALIVE”.
- 2) Researcher instructs the students to maintain silence and watch the movie and instructs further there will be a hand out given for further discussion.
- 3) Researcher shows the film.
- 4) Researcher after completion of the movie gives out handouts to students and gives them 10 minutes to think on the questions given in the handout.
- 5) Researcher then discusses each question one by one and comes to the answers of each.
- 6) Researcher on discussing the last question asks students to share their experiences, if any, to inspire other students.

## HAND-OUT

Watch the film 'Alive'. They are Uruguayan survivors of a plane crash that happened in the 70's on the Andes. They were stranded on the mountains without food or water for over a month, and they had to go through enormous difficulties to struggle for survival. Their extreme measure, for example, was to eat the meat of their dead friend's corpses, frozen under the snow. Then discuss the questions that follow in pairs.

1. Describe the scene.
2. What did the survivors look like? Does it give any clues about what they had been through?
3. What were some of the adversities they have probably faced?
4. How do you think they managed themselves?
5. Have you ever faced an extremely dangerous situation that made you think you were going to die or get seriously hurt? What had happened? When and where was it? How did you deal with the situation? What lesson did you learn from this experience?

## ACTIVITY 12: LEADERSHIP

### TIME:

1 Period (35 minutes)

### OBJECTIVES:

- To enable students to develop endurance skills in adverse situations.
- To enable students to develop accountability for the adverse situation.

### STUDENTS:

8 groups with 7 students in each group

### MATERIAL: Hand-outs

### PROCEDURE:

- 1) Researcher instructs students to form 7 groups of 5 students in each group.
- 2) Researcher starts with a proverb ‘when life gives you lemons, make lemonade’. The researcher further added, ” lemons are like the sour problems of life. To turn it into lemonade sugar is to be added i.e. to turn lemons into sweet success like lemonade”
- 3) Researcher further instructed students by saying, “all individuals and groups come across problems some minor, some very serious. Now, here are some ways suggested to deal with problems.
- 4) Researcher hands out the list to each group and gives them 5 minutes to discuss on the question, which way according to you is most successful? Researcher then discusses group wise which way they have chosen and why?

## HAND-OUT

### List of ways to deal with problem

- Ignore the problem.
- Try to get someone else to solve the problem by acting helpless.
- Procrastinate. Delay making a decision.
- Blame others for the problem.
- Get angry and do foolish things without really thinking about the consequences.
- Make a joke of the situation.
- Let someone else decide. Give in to group pressure.
- Think about the problem, consider information and choices, talk to others involved, and solve

## ACTIVITY 13: MOTIVATIONAL QUOTES

### TIME:

1 Period (35 minutes)

### OBJECTIVE:

- To enable students to define adversity
- To enable students to overcome adversities

**ACTIVITY:** Individual

### PROCEDURE:

- 1) Researcher instructs students about a competition of writing 2 motivational quotes on overcoming adversity.
- 2) Researcher gives them some examples of quotes given by some people.
- 3) Researcher gives them 15 minutes for writing down motivational quotes.
- 4) Researcher then collects all papers and tells them how well they have responded.
- 5) Researcher asks the students how inspiring the activity was and how did it help them in thinking about overcoming adversity.