

# **SYNOPSIS**

## **A Study of Adversity Quotient of Secondary School Students in Relation to their Academic Self Concept and Achievement Motivation.**

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## INTRODUCTION

The Dakar Framework for Action adopted in 2000 at the World Education Forum, Dakar, Senegal reaffirmed their commitment to achieve Education for all ( Jomtien Conference 1990) by the year 2015 through the six measurable goals. Of which the third goal states..... *‘Ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life-skills programmes.’* and the sixth goal envisages.... *‘Improving all aspects of the quality of education and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills.’*<sup>1</sup>

Life skills have been defined by W.H.O. as “..... abilities for adaptive and positive behaviour that enable individuals to deal effectively with the demands and challenges of everyday life.” They represent the psycho-social skills or competencies that determine acceptable positive behaviour and include reflective skills such as problem-solving and critical thinking, to personal skills and interpersonal skills.<sup>2</sup>

The Education for all no doubt is a development imperative aimed to achieve the Millennium Development goals, which envisages for children and youth a quality life where they can make informed choices in harmony with the environment.

Quality education stems from the idea of education catering to the learners needs and relevant to the stakeholders lives which may vary from society to society. However unless the basic needs of human health is not taken care of like physical health and more importantly mental health which is the root cause of all infirmities, quality education will only be a distant dream .

The WHO states mental health as “ .... *a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of*

*life, can work productively and fruitfully, and is able to make a contribution to his or her community*<sup>3</sup>

Thus it can be concluded that mental health and/or emotional wellbeing is a critical indicator of human development and serves as a key determinant of well being and quality of life.

The spate of incidents of suicides among youth and children is an alarm enough to reorganize thinking and include mental health and psychosocial perspectives in the educational system to achieve overall quality education. Education programmes hence should integrate mental health and psychosocial perspectives in efforts to improve quality of education. Statistics reveal an estimated one out of four people globally experience a mental health condition in their lifetime. Almost one million people die due to suicide every year, which is the third leading cause of death among young people.<sup>4</sup>

This situation warrants the attention of all the institutes of learning from school to universities to play a major role in controlling such tendencies among the student community by integrating some well devised need-based programmes in the school curriculum.

According to Paul G. Stoltz (1997), the number of adversities an individual faces each day on an average has increased from 7 to 23 in the past 10 years and individuals need to cope up with these pressures or stressors in life. Strange but true when some people sail through odds easily, others are pounded down by it inspite of possessing same IQ. This means, that there is some measurement to determine the ability of an individual to handle adversities.

Adversity Quotient is the science of human resilience. Resilience is the ability to adapt well to stress, adversity, trauma or tragedy. It entails remaining stable and maintaining healthy levels of physical and psychological functions, even in the face of chaos.

This is because, adversity quotient leverages on our natural ability to learn and change, enhancing this vital ability. Recent researches have proved that adversity quotient can be increased dramatically, permanently rewired and strengthened. The concept of adversity quotient is rooted in three sciences namely psycho neuroimmunology, neurophysiology, and cognitive psychology, which forms its building blocks.<sup>5</sup>

In order to improve one's adversity quotient, the individual needs to possess the desire /urge to achieve what he lacks or wants to improve and this urge, is nothing but motivation. David McClelland's research on achievement motivation led him to believe that, the need for achievement is a distinct human motive.

Achievement motivation can therefore, be defined as the need for success or the attainment of excellence. There are different forms of motivation - extrinsic or intrinsic. Individuals, who are intrinsically motivated use more effective learning strategies and achieve at higher levels. According to Irving Smiroff, 'Achievement motive' is the way an individual orients himself towards objects or conditions that he does not possess. It is conditioned by one's early training, experiences and subsequent learning. This theory states that people with high Achievement Motivation tend to be interested in the motivators (job itself). While people with low achievement motivation bother about the environment, how people feel about them rather than how well they are doing.<sup>6</sup>

Achievement of short term goals gradually helps build a positive self concept. The Self worth theory suggests that all individuals have a motivational "tendency to establish and maintain a positive self image, or sense of self worth"(Eccles & Wigfield,2002). It is believed that domain-specific self concept perceptions( eg. academic, physical, social) are organized in a hierarchical structure with the general omnibus self concept at the apex of the hierarchy (Bong & Skaalvik et al, 2003). Academic Self Concept is a component of self concept which is evident from the Shavelson hierarchical model ( Shavelson et al., 1976),

which has studied global self concept by splitting it into academic and non academic branches.<sup>7</sup>

Thus academic self concept can be defined as the individual's self perception of his or her academic ability (internal frame of reference), as well as the individual's assessment of how others in the school setting perceive his or her academic behavior (external reference) according to (Hattie,1992 et al)

Socio - economic status is based on family income, parental education level, parental occupation, and social status in the community. Families of high socio-economic status have access to a wide range of resources to promote and support young children's development, while it is the opposite for families of low Socio-economic status. Zill, Collins, West, and Hausken (1995) state that " low maternal education and minority-language status influences the development of children ”<sup>8</sup>

Therefore the researcher decided to study the relationship of Adversity Quotient with Academic Self Concept, Achievement Motivation and Socio - economic Status based on gender and school management with the intent that the comparison will bring to light the influence or cause and effect relationship among the variables of the study.

## **REVIEW OF RELATED LITERATURE**

### **Studies on Adversity Quotient**

The researcher reviewed literature on Adversity Quotient and has found that Adversity Quotient is a relatively new topic and researches done on Adversity Quotient are mostly in the field of Sales and Management and very few in the field of Education to the best of the researcher's knowledge. The researcher has hence, reviewed and also added researches related to 'negative life events, coping strategies, resilience' etc as they are a part of adversity and handling adversities.

**(a) Studies conducted in India.**

Sachdeva, P ( 2009) <sup>9</sup> conducted an experimental study to enhance the adversity quotient of potential leaders. The objectives of the program was to prepare an appropriate intervention programme to enhance adversity quotient and to test the effectiveness of the intervention program. The study was carried out on 1053 potential leaders. The programme has been content validated in two steps i.e with subject and methodology experts and by trial runs on ‘typical’ potential leaders. Data collected at the experimental stage was analysed quantitatively and qualitatively to assess the effectiveness of the intervention program on the whole as well as differentially for the separate demographic groups. The study revealed that the intervention program was effective in increasing the adversity quotient level of potential leaders (the participants) as compared to a control group taken from the same population.

Almeida, A (2009) <sup>10</sup> developed a program for enhancing the adversity quotient of Junior college students. The researcher carried out numerous activities to enhance adversity quotient. The findings revealed that there was a significant difference in the post-test means of AQ®, of junior college

D’Souza, R( 2006) <sup>11</sup>studied adversity quotient of secondary school students in relation to their school performance and school climate. The researcher compared the adversity quotient of secondary school students on the basis of school types. The study also tried to compare the relationship between adversity quotient and perceived school climate and also compared the relationship between adversity quotient and school performance. The findings showed that adversity quotient correlates positively with school performance. Also adversity quotient correlates positively with school climate. Students of CBSE Board showed better adversity quotient than students of State Board schools.

Manhas, S (2003) <sup>12</sup>studied the coping strategies among kashmiri migrant children who were uprooted due to militancy. The results showed that students

used 7 types of coping strategies. Many reported day dreaming, compensation, withdrawal, aggression as coping strategies while a few reported positive thinking, identification, negativism. All children largely used emotion focused coping rather than problem focused coping strategies.

Verma,S; Duggal, S (1995) <sup>13</sup> focused on effective coping strategies prevalent in college students. The findings revealed that students tried to face difficult situations in a mature manner yet they did withdraw from problems they encountered in life. Male students withdrew to drugs, alcohol while female became emotionally upset.

**(b) Studies conducted abroad**

Patdo, V.C ( 2011) <sup>14</sup> did a correlational study of the adversity quotient of parents with special children and adversity quotient of parents with normal children in Manila, Tondo, Espana. The study brought to light that the adversity quotient of the parents were moderate and that the mean scores of parents with normal children was higher than parents with special children. The study also brought to light that the adversity quotient of the respondents were not influenced by their age and gender

Huijuan, Z (2009) <sup>15</sup> studied adversity quotient and academic performance among college students at St. Joseph's College, Quezon City. The study showed that sex difference did not affect the selected respondents' adversity quotient however course and year level significantly affected the said respondents' adversity quotient. Further the study also revealed a significant relationship between adversity quotient of the respondents and their academic performance during the first semester of the school year 2008-09.

Villaver,E (2005) <sup>16</sup> attempted to study Adversity Quotient levels of female grade school teachers of a public and private school in Rizal Private province. The results indicated that there was no significant difference between adversity quotient of public and private school teachers. Teachers belonging to low socio

economic class had moderate adversity quotient level than teachers belonging to middle socio economic class. Both public and private school teachers were found to have moderate quotient levels.

Williams, Mark(2003) <sup>17</sup> studied the relationship between Principal's response to adversity and student's achievement .The study examined the principal's self perception of how they responded to adversity and the influence it had on the student's achievement. The results revealed that students with moderately high adversity quotient principals outperformed students with moderately low adversity quotient principals.

Abejo ( 2002) <sup>18</sup> studied adversity quotient profile of 39 employees of the College of Arts and Sciences of St. Joseph's College in Quezon City for the school year 2001- 2002 as an indicator of their effectiveness as leaders. Based on the results, 58.94% of the employees of St. Joseph's College of Arts and Sciences fall within the moderate level of adversity quotient, however, there was no significant difference between male and female respondents in their adversity quotient, but the results showed that older employees had higher adversity quotient than the younger employees. Moreover, there was no significant difference in the adversity quotient of the workers in relation to their respective job description; viz., teaching, (17) non-teaching (10) and administration (12)

Wayman,J.C.( 2002) <sup>19</sup> studied the utility of educational resilience in school drop outs for degree attainment. The present study examined the factors associated with degree attainment in drop outs. The findings indicated that viewing the returning dropouts as a resilient students did provide a more useful set of factors associated with degree attainment.

Ollendick,T.H et al ( 2001) <sup>20</sup> explored the relationship among negative life events, negative attributional style, avoidant coping and level of fear in children and adolescents, who survived residential fires. It was found that negative life events, negative attributional style and avoidant coping were found to be

predictive of levels of fear. However the relation between negative life events and fear were moderated by mother's level of education, In addition, negative attributional style and avoidant coping were related to levels of fear in those children, whose mothers were high in educational levels but not those, whose mothers were low in educational level.

Dela Fuente and Lee (1999) <sup>21</sup> made an exploratory study on the adversity quotient profile of the graduating students of Assumption College. Based on the results, the graduating batch 1999 has a moderate adversity quotient and CO2RE profile; with their average mean scores for all the four dimensions of Control (C), Origin and Ownership (O<sub>2</sub>), Reach ( R), and Endurance ( E) falling within the mid-range. This could mean that most times, the students are able to handle adversity pretty well, depending on the degree and duration of the adverse event.

Fergusson,D;Lynskey,M (1996) <sup>22</sup>conducted a 16 year longitudinal study of birth cohort of New Zealand children, to examine adolescent resiliency to family adversity. The findings clearly indicated that children from high risk family showing resilience to development of externalizing behaviour, were characterized by a combination of at least average intelligence, low tendencies to novelty seeking and avoidance of affiliation with delinquent peers in adolescence.

## **STUDIES ON ACADEMIC SELF CONCEPT**

### **(a) Studies conducted in India**

D'Souza, G (2009) <sup>23</sup> conducted a correlational study of stress on students of standard X in relation to academic self concept. The study revealed a negative, moderate and significant correlation of stress with academic self concept, which implied that higher the academic self concept of students, lower is the total stress perceived by them.

Hangal,S& Aminabhavi,A (2007) <sup>24</sup> assessed the impact of maternal employment on the self concept, emotional maturity and achievement motivation of adolescents. The results revealed that the adolescent children of homemakers have significantly higher self concept ( such as intellectual and school status, anxiety, happiness and satisfaction, as well as in overall self-concept) . It was also noticed that children of employed mothers have high emotional maturity and female children of employed mothers are highly achievement oriented

Aziz,S; Shah,A (1997) <sup>25</sup> studied the relationship of responsibility and academic self concept. Results showed that contrary to nonaddicts, addicts scored significantly lower both on the Responsibility scale and the Academic Self Concept Scale.

Dixit, S. K. (1989) <sup>26</sup> investigated the effect of personality factors and self concept on educational achievement. The findings of the researcher revealed that personality factors significantly influenced the educational achievement. It indicated that though educational achievement was related to intelligence, self concept was not related to it

Ramaswamy, R. (1988) <sup>27</sup> conducted an inquiry into the correlates of achievement .The study involved analyzing factors that were responsible for the scholastic performance of std. X students. The findings revealed that academic achievement was positively related to personality, achievement motivation, self concept, study habits and socioeconomic status among high and low achieving boys and girls. The study also indicated that significant difference was found between high and low achievers in personality, achievement-motivation, self concept, study habits and socio-economic status

#### **(b) Studies conducted abroad**

Sullivan,A ( 2009) <sup>28</sup> conducted a longitudinal study of academic self-concept, gender and single-sex schooling in the 1970 British Cohort Study. A key aim of this paper was to assess whether single sex schooling and school sector had an

impact on academic self-concept at age 16. The analysis showed no significant effect of school sector on self-concept. Nor any significant effect of single sex schooling on boys' or girls' self-concepts in any subject area was found.

Zen, T; Chien,C ( 2007) <sup>29</sup> studied the influences of the academic self-concept on academic achievement from the perspective of learning motivation. The study tried to focus on whether, a student's self concept in one learning subject exerts a positive effect on his/her achievement in the same subject, but a negative effect on the achievement in another learning subject. The model demonstrated that students with higher academic self-concept tend to invest more time to engage in learning activities in correspondent learning subject; on the other hand, the time spending on study for other learning subjects will decrease relatively.

Marsh,Trautwein et al(2005) <sup>30</sup> studied the reciprocal effects models of causal ordering of academic self-concept, Interest, Grades, and Standardized Test Scores. Reciprocal effects models of longitudinal data showed that academic self-concept is both a cause and an effect of achievement. The results demonstrated the positive effects of academic self-concept on a variety of academic outcomes and suggested integration of academic self-concept with the developmental motivation literature

Du Plessis,A; Bouwer, A;Grimbeek, R(2002) <sup>31</sup> conducted a study to develop a diagnostic instrument to assess the academic self-concept of Grade 7 learners in a historically under-resourced school. The study revealed that academic self-concept influenced the way in which children perform in their school work and grow up. The relation between academic achievement and academic self-concept is circular and reciprocal. The relation between academic achievement in a specific subject and subject-specific self-concept is even closer. The current emphasis on achievement justifies research on academic self-concept, especially concerning learners in historically under-resourced schools who have not had the same benefits of schooling as learners in well resourced schools.

Byer, John L ( 2001)<sup>32</sup> studied the consistency correlation between student's perceptions of classroom involvement and academic self--concept in secondary social studies classes. The findings from both samples revealed a statistically significant relationship between the variables. Evidence of consistent relationships between the two variables was increased.<sup>33</sup>

Zisk,J ( 1998) <sup>34</sup> studied the effects of cooperative learning on academic self-concept and achievement of secondary chemistry students. The purpose of this study was to determine whether or not using cooperative learning teaching methods in a high school chemistry class would significantly increase students' academic self-concept and academic achievement. The study compared cooperative learning and traditional learning methods and their effect on academic self-concept and achievement of students. Findings indicated that there appears to be a positive correlation between academic self-concept and academic achievement. It further indicated that there is an association between the type of learning environment in respect to social interdependence, and levels of self-concept.

## **STUDIES ON ACHIEVEMENT MOTIVATION**

### **(a) Studies conducted in India**

Alam, M.M.(2009) <sup>35</sup> made a correlational study of academic achievement in relation to creativity and Achievement Motivation. The results showed a significant positive relationship between achievement motivation and academic achievement.

Shaikh, F.M.(2008) <sup>36</sup> studied time management among student teacher in relation to their to their achievement motivation and personality. No significant difference was found in the achievement motivation scores of the student – teachers and their personality in the total sample The time management scores and achievement motivation scores of male student –teachers was positive and direct in nature and moderate in magnitude The time management scores and

achievement motivation scores of student- teachers from private aided colleges were positive, direct, low in magnitude. The time management scores and achievement motivation scores of student- teachers from private unaided colleges were positive, direct, moderate in magnitude.

Shahras,P.V.( 2006) <sup>37</sup> attempted to examine the relationship between achievement motivation and classroom climate as perceived by the students. The findings revealed a significant difference in the achievement motivation scores of private aided and private unaided schools. Mean scores of the private unaided were higher than the aided schools. Girls scored higher than boys in their achievement motivation. Relationship of achievement motivation scores and classroom climate scores of boys were found to be significantly greater as compared to girls.

Ramachandra(2005) <sup>38</sup> studied achievement motivation of secondary school students (urban and rural) on the basis of their parents educational background. The objectives were to study the achievement motivation of students of urban and rural schools And to compare the achievement motivation of urban and rural secondary school students. The findings revealed no significant difference in the achievement motivation of urban school students and rural school students. No significant difference was found in the achievement motivation of Urban and Rural school students on the basis of parent's educational background.

Shaikh,R.(2000)<sup>39</sup> studied anxiety and achievement motivation of students in relation to their school and home environment. The findings revealed that there is a significant gender difference in the student's anxiety as well as achievement motivation with girls scoring higher than the boys in both variables. There is positive relationship between total sample of student's achievement motivation and perceived school environment. No significant relationship was indicated between achievement motivation and perceived home environment

Padhi, J.S.(1997) <sup>40</sup> conducted a correlation study on classroom environment and achievement motivation. The researcher studied the relation between classroom environment and achievement motivation and also the effect of classroom environment on achievement motivation. The findings revealed that there existed a positive and significant relationship between classroom environment and achievement motivation.

SaiGeetha,P & Karunanidhi, S( 1995) <sup>41</sup> conducted a study on religious attitude, locus of control and achievement motivation of students belonging to different religions. The results showed a positive high correlation relationship between religious attitude and achievement motivation. Students belonging to different religious groups differed in their religious attitude and achievement motivation.

#### **(b) Studies conducted abroad**

Lam, Yim, Law & Cheung (2004) <sup>42</sup> studied the effects of competition on achievement motivation in Chinese classroom. The findings stated that students in a competitive conditions performed better in easy tasks than their counterparts in the non competitive conditions. However they were more performance oriented and more likely to sacrifice learning opportunities for better performance.

Neumeister, K. L. S (2004) <sup>43</sup> conducted a study on the understanding of relationship between perfectionism and Achievement Motivation in gifted college students. The results indicated that for the socially prescribed perfectionists an underline motive to avoid failure influenced their achievement goals.

Verkuyten, Thijis & Canatan (2001) <sup>44</sup> studied achievement motivation and academic performance among Turkish early and young adolescents in Netherlands. The Turkish students had stronger family oriented Achievement Motivation. There was no difference in individual achievement motivation between Turks and Dutch. Only among the former group was a combination of family motivation and individual motivation found. Also for the Turks, family motivation was positively related to task goal orientation which mediated the relationship between family motivation and academic performance

Mcewan & Goldenberg(1999) <sup>45</sup> conducted a study on achievement motivation, anxiety and academic success in First year students of Masters in Nursing. The findings revealed that participants showed high achieving tendencies and academic ability, while state anxiety was negatively correlated, trait anxiety was the only valid predictor of academic success.

## **STUDIES ON SOCIO-ECONOMIC STATUS**

### **(a) Studies conducted in India**

Adsul, R.K; Kamble, V( 2008) <sup>46</sup> conducted a study to investigate the effects of gender, economic background and caste differences on achievement motivation possessed by college students on the basis of societal transformation .An exploratory method of research was employed by adopting 2X3X4 factorial design. The study was based on one hundred and ninety two under graduate students of different castes (FC, OBC, SC, NT) of various colleges from Sangli city of Maharashtra, was selected by random sampling procedure. The results showed that there is a significant difference between scheduled caste and Nomadic tribes, scheduled caste and other backward caste students and between male and female students. Forward caste and scheduled caste group students having a high achievement motivation while other backward and nomadic tribes group students having an average level achievement motivation. As well as male students having a high achievement motivation while female students having a below average level of achievement motivation.

Akre (2008) <sup>47</sup> conducted a study on the impact of socio- economic status upon attitude towards mathematics. The result indicated that over –achievers are better than under-achievers in respect of social, economic, SES and attitude towards mathematics.

Sucharita Parida ( 2003) <sup>48</sup> studied the effect of socio - economic status, school environment and medium of instruction on the mental abilities and academic achievement of school children, it was found that both mental abilities and

academic achievement of the respondents differed significantly due to variation in the socio - economic status. The socio - economic status of the whole sample was found to have significant relationship with mental ability and academic achievement. The relationship between socio - economic status and academic achievement was found significant but the relationship between socio - economic status and mental ability was not found significant. The socio - economic status was found to contribute 54% to mental abilities and 29% to academic achievement. Both socio - economic status and mental ability were found to contribute 51% to academic achievement.

Archana Kumari (2000) <sup>49</sup>conducted a study on a study of impact of computer education on the scientific attitude of students. One of the objectives was to study the role of socio - economic status in the development of scientific attitude of students. <sup>50</sup>The sample consisted of 572 students of class VIII (Computer Education: 308, Non-Computer Education: 264). SES Scale by Kuppaswamy, Raven's Progressive Matrices, IPAT by Cattell, and Adjustment Inventory by Mittal were used for the study. The finding revealed that socio - economic status affects the scientific attitude significantly. The average socio - economic status students have been found to develop scientific attitude at a significantly higher level. The education of mothers has been found to affect the development of scientific attitude among children significant.

Shinde, S (1994) <sup>51</sup> studied socio - economic life and rehabilitation problem of tribals from Sanjay Gandhi National Park, Borivili, India. The study was done to assess entitlement, employment and income sources of tribals settled in National park since generations. The study revealed that living conditions have worsened due to increase in population and decrease in employment opportunities. Also it was brought to light that problems such as maternal mortality, infant mortality, length of life, electricity are have not changed which affected their development.

**(b) Studies conducted abroad**

Akhtar, Z (2011) <sup>52</sup> conducted a study on a comparative study of students learning style, socio - economic status and learning achievement of developed and under-developed districts of Pakistan. The upper class of developed districts prefers avoidant and upper class of under-developed districts prefer dependent learning style. The middle class students of developed and under-developed districts prefer independent learning style.

Muola, J.M ( 2010) <sup>53</sup> studied the relationship between academic achievement motivation and home environment among students of standard eight. The study was carried out on 235 standard eight Kenyan pupils from six urban and rural primary schools randomly selected from Machakos district. Their age ranged between 13 and 17 years. Two questionnaires, the simple profile (SP) and home environment questionnaire, were used to provide information on the pupil's levels of academic motivation and home environment. The study used the ex-post facto correlational method to determine the existence of relationship between the variables among the elected pupils of urban and rural areas of Machakos district. Although the correlations among the variables were low, they showed that pupils' motivation to do well in academic work is to some extent dependent on the nature of their home environment. Thus the findings of the study supported previous findings of a positive relationship between academic achievement motivation and home environment.

Gorard, S; Huat, S.B (2009) <sup>54</sup> studied the impact of socioeconomic status on participation and attainment in science. The objective of the study the reduction in the uptake of physical sciences in higher education in United Kingdom. The results showed that students from poorer families are less likely to take sciences post -16 than many other subjects and those who do are then less likely to obtain grades high enough to encourage further study. Also it was found that at ages between 7 and 11 attainment in English, Maths and Science was negatively related to living in an area of deprivation.

Leonard, E; Box, J.A.L ( 2009) <sup>55</sup> studied the relationship between Mississippi Accreditation Ranking and Socio-economic status of student populations in Accredited schools. The results showed that Socio-economic status is significantly related to aggregate student achievement. Schools with higher numbers of low Socio-economic status were more likely to receive lower accreditation ranking while schools with lower numbers of low socio-economic status students were likely to receive higher accreditation rankings.

Black, E; Peppe, S; Gibbon, F( 2008) <sup>56</sup> studied the relationship between socio - economic status and lexical development. The British picture vocabulary Scale, second edition ( BPVS– II), a measure of receptive vocabulary widely used by speech and language therapists and researchers into speech and language disorders, as an indicator of speech delay. This study tested the hypothesis that receptive vocabulary is associated with socio-economic status. The results showed no significant correlation between the two measures.

Angela, P., Chen, C.H et al (2007) <sup>57</sup> studied the association between parental socio-economic status and medical students' professional and personal development. The study assessed the correlation between family status ( indexed by parental education and occupation) and medical students' mental health status and characters. The results revealed that Socio-economic status of parents is associated with personal and professional development. The mother's Socio-economic status was associated with student's self reported stress, mental disturbances, attitude towards life, personality, health, discipline, internationalization and professionalism. Father's Socio-economic status did not show a statistically significant association with the above stress, physical and mental health factors but showed an association with some personality factors. Greater the difference in the educational level, more was found to be the level of stress, hopelessness and pessimism manifested by the students.

Alam (2001) <sup>58</sup> conducted a study on academic achievement in relation to socioeconomic status, anxiety level and achievement motivation among Muslim and non-Muslim school children of Uttar Pradesh. A significant positive

relationship has been witnessed between socio- economic status and academic achievement of Muslim and non- Muslim children.

## **NEED OF THE STUDY**

A review of related literature shows that a few investigations have been carried out in the area of adversity quotient, academic self concept, achievement motivation and Socio-economic status and some of its correlates like school performance ( DSouza, R; 2006), leadership ( Sachdeva, P; 2009), types of schools ( Sullivan,A; 2009), parents of special children ( Patdo,V.C; 2011), academic achievement ( Zen,T; Chien, C; 2007), responsibility ( Aziz, S; Shah, A; 1997), classroom involvement (Byer, John,L; 2001), emotional maturity( Hangal,S Aminabhavi,A;2007), methods of learning ( Zisk,J;1998), creativity ( Alam, M.M ; 2009), perceived classroom climate( Shahrar,P.V; 2006, Padhi,J.S; 1997), anxiety( Mcewan; Goldenberg; 1999, Alam,2001), caste differences ( Adsul, R.K; kamble,V; 2008), religious attitude (SaiGeetha,P; Karunanidhi,S;1995) , scientific attitude( Akre; 2008, Archanakumari; 2000),school environment and medium of instruction ( Parida, S; 2003), personal development( Angela,P; Chen,C.Het al; 2007) etc. However few existing studies or none in India, according to the researcher's knowledge have attempted to investigate the possibility of a relationship between adversity quotient, academic self concept, achievement motivation and socio-economic status comprehensively.

The researcher is of the view that adversity quotient of students has a positive correlation with their academic self concept. Since a positive academic self concept is important for any student and can be acquired after he has mastered the subject/s. Acquiring mastery is initially may be perceived as a challenge which requires a certain ability to take on them. Therefore it is important to test the adversity quotient of students.

This study gains importance because any student or individual in his pursuit to attain excellence or success in any task needs to be sufficiently motivated. The road to success is never easy but interspersed with challenges. Hence it is necessary to find if there exists a cause-effect relationship between adversity quotient and achievement motivation.

Students studying in a school come from different socio - economic background, with differences in parental qualification and limited resources which may influence their ability to face adversities, or their achievement motivation or their academic self concept. The present study is thus an attempt to investigate into the adversity quotient of students in relation to the above variables w.r.t. gender and types of school management.

## **STATEMENT OF THE PROBLEM**

“A Study of the Adversity Quotient of Secondary School Students in Relation to their Academic Self Concept and Achievement Motivation .”

## **VARIABLES OF THE STUDY**

The variables of the present study are Adversity Quotient, Academic Self Concept, Achievement Motivation and Socio-economic Status.

## **OPERATIONAL DEFINITIONS OF THE VARIABLES**

Adversity quotient is the assessment of one’s ability to respond to challenges in life, using adversity response profile based on the following dimensions.

- Control measures the degree of control the person perceives that he has over adverse events.

- Ownership is the extent to which the person owns, or takes responsibility for, the outcomes of adversity or the extent to which the person holds himself accountable for improving the situation
- Reach is the degree to which the person perceives good or bad events reaching into other areas of life.
- Endurance is the perception of time over which, good or bad events and their consequences will last or endure.

On the basis of the adversity quotient scores obtained with the adversity response profile, individuals are classified as people with high, moderate and low adversity quotient.

### **Academic Self Concept**

Academic self concept has been defined as the relatively stable idea possessed by a student based on a combination of judgments by self and “significant others” (parents, teachers and peers), concerning his/her behaviour, strengths and weaknesses in the academic domain.

### **Achievement Motivation**

Achievement motivation is defined as the inclination or the drive to persevere at a task, that may be difficult or demanding in order to succeed, excel or attain mastery.

### **Socio-economic Status**

Socio-economic Status is defined as an individual or group position within a society, which depends on a combination of variables such as occupation, education, income, wealth and place of residence

## **AIMS OF THE STUDY**

The researcher has a two- fold aim:

1. To study the adversity quotient in relation to academic self concept, achievement motivation and socio - economic status of secondary school students on the basis of type of schools and gender.
2. To prepare a program to enhance the adversity quotient of secondary school students and to test the effectiveness of the program.

## **OBJECTIVES OF THE STUDY**

The study was conducted with the following specific objectives:

### **PHASE I**

1. To compare the following on the basis of school types
  - a) Total adversity quotient scores of students
  - b) Control dimension scores
  - c) Ownership dimension scores
  - d) Reach dimension scores
  - e) Endurance dimension scores
2. To study the academic self concept scores of students on the basis of school types
3. To study the achievement motivation scores of students on the basis of school types
4. To ascertain gender differences in the following
  - a) Total adversity quotient scores of the students
  - b) Control dimensions scores
  - c) Ownership dimensions scores
  - d) Reach dimensions scores
  - e) Endurance dimensions scores
5. To ascertain gender differences in the academic self concept scores of students

- 6 To ascertain gender differences in the achievement motivation scores of students
7. To ascertain the relationship of total adversity quotient scores with academic self concept scores for the following.
  - a) Total sample of students
  - b) Boys and
  - c) Girls
8. To ascertain the relationship of total adversity quotient scores with achievement motivation scores for the following.
  - a) Total sample of students.
  - b) Boys and
  - c) Girls
9. To ascertain the relationship of total adversity quotient scores with socio - economic status scores for the following.
  - a) Total sample of students.
  - b) Boys and
  - c) Girls
10. To ascertain the relationship of achievement motivation with academic self concept of the total sample.
11. To ascertain the relationship of academic self concept with socio - economic status of the total sample.
12. To ascertain the relationship of achievement motivation with socio - economic status of the total sample.
13. To ascertain the combined relationship of adversity quotient with academic self concept, achievement motivation and socio - economic status

## PHASE II

- 14) To compare
  - a) the pre test adversity quotient scores
  - b) the post test adversity quotient scores between experimental and control groups
- 15) To ascertain the effect of the Adversity Quotient Enhancement Program on the adversity quotient scores of the experimental group.

## **HYPOTHESIS OF THE STUDY**

The following null hypothesis have been formulated for the present study:

### **PHASE I**

- 1) There is no significant difference in the following on the basis of school types
  - a) Total adversity quotient scores of students
  - b) Control dimension scores
  - c) Ownership dimension scores
  - d) Reach dimension scores
  - e) Endurance dimension scores
- 2) There is no significant difference in the academic self concept scores of students on the basis of school types.
- 3) There is no significant difference in the achievement motivation scores of students on the basis of school types.
- 4) There is no significant gender difference for the following
  - a) Total adversity quotient scores of the students
  - b) Control dimension scores
  - c) Ownership dimension scores
  - d) Reach dimension scores
  - e) Endurance dimension scores
- 5) There is no significant gender difference in the academic self concept scores of students.
- 6) There is no significant gender difference in the achievement motivation scores of students.
- 7) There is no significant relationship of total adversity quotient scores and academic self concept scores for the following.
  - a) Total sample of students
  - b) Boys and
  - c) Girls
- 8) There is no significant relationship of total adversity quotient scores and achievement motivation scores for the following.

- a) Total sample of students.
  - b) Boys and
  - c) Girls
- 9) There is no significant relationship of total adversity quotient scores with socio-economic status scores for the following.
- a) Total sample of students.
  - b) Boys and
  - c) Girls
- 10) There is no significant relationship of achievement motivation scores with academic self concept scores of students.
- 11) There is no significant relationship of academic self concept scores with socio-economic status scores of students.
- 12) There is no significant relationship of achievement motivation scores with Socio-economic status scores of students.
- 13) There is no significant combined relationship of academic self concept, achievement motivation and Socio-economic status scores with adversity quotient scores of students.

## PHASE II

- 14) There is no significant difference in the pretest adversity quotient scores between experimental group and control group.
- 15) There is no significant difference in the post test adversity quotient scores between experimental group and control group when differences in pre test scores of the two groups have been controlled.
- 16) There is no significant effect of the adversity quotient enhancement program on the adversity quotient scores of the experimental group.

## SCOPE AND DELIMITATIONS OF THE STUDY

The present study employed the quantitative approach of research methodology and not the qualitative approach. The present study was restricted only to the secondary schools of private aided and private unaided schools

affiliated to SSC Boards situated in Greater Mumbai area. It did not include schools of CBSE and ISCE. The research was carried out in standard 8th of secondary schools only and not in junior colleges or degree colleges.

The sample was fairly representative with respect to types of school and gender. Variables such as caste, religion and religious background was not considered. The researcher studied the control, ownership, reach, endurance dimensions of adversity quotient w.r.t to types of schools and gender differences only

The data was collected from English medium schools only and not from Hindi or Marathi medium schools. The sample included both males and females.

The adversity quotient scale contained items dealing with the control, ownership, reach and endurance dimensions of adversity quotient

The achievement motivation scale had items like academic motivation, academic challenges, achievement anxiety, importance of grades/marks, meaningfulness of task, relevance of school future goals, attitude towards education, work methods, attitude towards teachers, interpersonal relations, individual concerns, general interest, dramatics, sports etc.

The academic self concept scale was a semantic differential rating scale which measured 26 dimensions of behavior which on comparison with internal and external frames of reference provided a clear estimate of the students' self perceptions of their activity, evaluation and potency in the academic domain. The tool comprised of a list of pairs of adjectives describing different qualities pertaining to school work.

The researcher studied the socio - economic status of students from students' perception not from parents' perception.

## **SIGNIFICANCE OF THE STUDY**

The topic under investigation is the one that is of concern not only to the educators, but also to the curriculum framer, parents, counselors and the student population at large, and hence, would make a significant contribution to the field of education. The present study will make students aware of their existing potentials and help bring about the required changes in their perception, attitude and behavior. The study will learn to identify obstacles/ challenges as opportunities and move ahead to take charge of their lives.

This study will help parents, educators and counselors immensely as they will gain an insight of how to help the students identify challenges before its seeps into their lives and prepare them to have belief in their abilities and work towards a solution and not giving up on them.

It will help curriculum and syllabus framers to know the present needs of students and accordingly plan to incorporate topics related to the issues under investigations so that all students will eventually benefit and prepare them for life.

## **METHODOLOGY OF THE STUDY**

The phase I of the present study is of the quantitative descriptive type. It is of co - relational type because it deals with the relationship of adversity quotient with academic self concept, achievement motivation and socio - economic status. It is also of causal- comparative type as this approach has been used to compare adversity quotient, academic self concept, achievement motivation and socio - economic status on the basis of gender and different types of schools.

The phase II of this study is experimental in nature adopting the quasi – experimental method of the pre – test post – test non equivalent group design. This method is adopted to test the effectiveness of the program for enhancing the adversity quotient of students.

### **Phase I**

The data was collected from fifteen (aided and unaided) schools of Greater Mumbai. A three stage sampling was used for selecting the sample. In the first stage, stratified random sampling technique was used to select schools on the basis of their location, for the purpose of which Greater Mumbai was divided in to three strata, viz, North Mumbai, South Mumbai and Central Mumbai. In the second stage, the schools were selected on the basis of types of schools like private-aided and private-unaided schools and in the third stage students were selected by using the incidental sampling technique. The size of the final sample was 806 secondary school students which included 473 boys and 333 girls from standard VIII.

### **Phase II**

In this phase, the school which has the lowest mean score as compared to the other schools was chosen as the experimental group for the study and another school in the same vicinity was chosen as the control group.

## **TOOLS OF THE STUDY**

The tools used for the research are classified under the following heads:

### **A] Readymade tools**

- (i) Adversity Response Profile by Stoltz, P ( 1997)

The internal consistency reliability by Cronbach's coefficient alpha was 0.86<sup>59</sup>

- (ii) Academic Self Concept by D'Souza, G ( 2008)

The reliability coefficient obtained for internal consistency was 0.977. The coefficient of stability obtained for test – retest reliability of the scale was 0.8869.<sup>60</sup>

- (iii) Achievement Motivation by Deo, P and Mohan, A ( 1985)

The concurrent validity of the scale with the projective test is 0.54<sup>61</sup>

- (iv) Socio- economic status Inventory is modified by Shahras (2009)

The internal consistency reliability of the tool by using Split half method and Cronbach's alpha were found to be 0.82 and 0.88 respectively.

## **B] Tool prepared by the researcher**

- A program for enhancing the adversity quotient of Secondary students of std VIII was prepared by the researcher
- A personal data sheet was prepared to collect information about name of the student, name of the school, types of school, standard and gender.

## **TECHNIQUES OF DATA ANALYSIS**

The following statistical techniques were used in the study

1. t - test
2.  $\omega^2$ - estimate
3. Coefficient of Correlation
4. Z test
5. Multiple Correlation
6. ANCOVA
7. Wolf's formula

## **MAJOR FINDINGS OF THE STUDY**

### **PHASE I**

1. The null hypothesis states that there is no significant difference in the total adversity quotient scores (TAQS), control dimension scores (CDS), ownership dimension scores (ODS), reach dimension scores (RDS) and endurance dimension

scores (EDS) of students on the basis of school types. The statistical technique used to test this hypothesis was 't' test and  $\omega^2$  estimate. The obtained 't' for differences in EDS ( 0.29) for school types is less than 1.96 at 0.05 level of significance. Thus the null hypothesis is accepted. However the obtained 't' for differences in TAQS (3.45), CDS ( 2.95) are greater than 2.57 at 0.01 level of significance while ODS ( 2.51) and RDS (2.56) are greater than 1.96 at 0.05 level of significance . Therefore the null hypothesis is rejected. 1.33 percent, 0.95 percent, 0.65 and 0.68 percent of variance in TAQS, CDS, ODS and RDS is associated with school types respectively.

2. The null hypothesis states that there is no significant difference in the academic self concept scores (ASCS) of students on the basis of school types. The statistical technique used to test this hypothesis was't' test. The obtained't' for ASCS (0.89) is less than the 1.96 at 0.05 level. Thus the null hypothesis is accepted.
3. The null hypothesis states that there is no significant difference in the achievement motivation scores (AMS) of students on the basis of school types. The statistical technique used to test this hypothesis was 't' test. The obtained 't' for AMS( 0.21) is less than 1.96 at 0.05 level. Thus the null hypothesis is accepted.
4. The null hypothesis states that there is no significant gender difference in the total adversity quotient scores (TAQS), control dimension scores (CDS), ownership dimension scores (ODS), reach dimension scores (RDS) and endurance dimension scores (EDS) of students. The statistical technique used to test this hypothesis was 't' test. The obtained 't' for gender differences in TAQS (0.76), CDS (0.3), RDS ( 0.05)and EDS ( 0.34) are less than 1.96 at 0.05 level. Thus the null hypothesis is accepted. However the obtained 't' for ODS (2.34) is greater than 1.96 at 0.05 level of significance. Therefore the null hypothesis is rejected. 0.55 percent of variance in ODS is associated with gender differences.
5. The null hypothesis states that there is no significant gender difference in the academic self concept scores (ASCS) of students. The statistical technique used to test this hypothesis was 't' test. The obtained 't' for ASCS ( 2.15 ) is greater than

1.96 at 0.05 level. Hence the null hypothesis is rejected, 0.45 percent variance in ASCS is associated with gender difference.

6. The null hypothesis states that there is no significant gender difference in the achievement motivation scores (AMS) of students. The statistical technique used to test this hypothesis was 't' test and  $\omega^2$  estimate. The obtained 't' for AMS (6.35) is greater than 2.57 at 0.01 level. Hence the null hypothesis is rejected, 4.65 percent variance in AMS. is associated with gender difference.
7. The null hypothesis states that there is no significant relationship between AQS and ASCS w.r.t to total sample of students, boys and girls . The statistical technique used to test this hypothesis is Pearson's coefficient of correlation ( r ). The obtained 'r' between AQS and ASCS for total sample of students (0.14), boys ( 0.16) and girls (0.25) is greater than the tabulated value of 'r' at 0.01 level of significance. These 'r's are negligible in magnitude except in the case of girls where 'r' is low in magnitude. All the 'r's are positive in direction. 1.96 percent, 2.56 percent and 6.25 percent variance in AQS of total sample of students, boys and girls is associated ASCS respectively. The obtained 'z' for gender difference between AQS and ASCS (5.78) is greater than 2.58 at 0.01 level of significance. Therefore the null hypothesis is rejected.
8. The null hypothesis states that there is no significant relationship between AQS and AMS w.r.t. total sample of students, boys and girls . The statistical technique used for this hypothesis is Pearson coefficient of correlation (r). The obtained 'r' between AQS and AMS for boys ( 0.08 ) is less than the tabulated value of 'r' at 0.05 level of significance. The 'r' is negligible in magnitude and positive in direction. Thus the null hypothesis is accepted. However the 'r's for total sample of students (0.12), girls (0.19) are greater than the tabulated value of 'r' at 0.01 level of significance. These 'r's are negligible in magnitude and positive in direction. 1.44 percent and 3.61 percent of variance in AQS of total sample of students and girls is associated with AMS. Therefore the null hypothesis is rejected.
9. The null hypothesis states that there is no significant relationship between AQS and SESS w.r.t. total sample of students, boys and girls . The statistical

technique used for this hypothesis is Pearson coefficient of correlation (  $r$  ). The obtained 'r' between AQS and SESS for boys( 0.03) is less than the tabulated value of 'r' at 0.05 level of significance. The 'r' is negligible in magnitude and positive in direction. Thus the null hypothesis is accepted. However the 'r's for total sample of students (0.09) and girls ( 0.16) are greater than the tabulated value of 'r' at 0.05 and 0.01 levels of significance respectively. The value of 'r' is positive, negligible in magnitude. 0.81 percent and 2.56 percent of variance in AQS of total sample of students and girls is associated with SESS. Thus the null hypothesis is rejected.

10. The null hypothesis states that there is no significant difference in the relationship between AMS and ASCS w.r.t. total sample of students. The statistical technique used to test this hypothesis is Pearson's coefficient of correlation (  $r$  ). The obtained 'r' (0.50 ) is positive, substantial in magnitude and greater than the tabulated 'r' value at 0.01 level. Hence the null hypothesis is rejected. 25.0 percent variance in AMS of the total sample of students is associated with ASCS.
11. The null hypothesis states that there is no significant relationship between ASCS and SESS w.r.t. to total sample of students. The statistical technique used to test this hypothesis is Pearson's coefficient of correlation (  $r$  ). The obtained 'r' ( 0.16 ) is positive, negligible in magnitude and greater than the tabulated 'r' value at 0.01 level. Hence the null hypothesis is rejected. 2.56 percent variance in ASCS of total sample of students is associated with SESS.
12. The null hypothesis states that there is no significant relationship between AMS and SESS w.r.t. total sample of students. The statistical technique used to test this hypothesis is Pearson's coefficient of correlation (  $r$  ). The obtained 'r' ( 0.14 ) is positive, negligible in magnitude and greater than the tabulated 'r' value at 0.01 level. Hence the null hypothesis is rejected. 1.96 percent variance in AMS of total sample of students is associated with SESS.
13. The null hypothesis states that there is no significant combined relationship of ASCS, AMS and SESS with AQS of students. The technique used for testing this hypothesis is multiple correlation. The obtained F is 9.16 which is greater than

3.06 at 0.01 level of significance. The combined relationship is significant, hence the null hypothesis is rejected.

## PHASE II

This phase of the study is only of secondary in importance . it is basically aimed at exploring the possibility of ascertaining whether AQS can be influenced positively through educational programs and for further indepth research. Hence the findings and concl of this study are only indicative and not conclusive.

14. The null hypothesis states that there is no significant difference in the pre test adversity quotient scores ( AQS) of the experimental and control groups. The technique used for testing this hypothesis is 't' test. The obtained 't' test value of AQS for pre test of the experimental and control group is 3.42 which is greater than 2.66 at 0.01 level. It is significant for the pre test scores of AQS, hence the null hypothesis is rejected.

As there is a significant difference in the pre test scores of AQS of the experimental and control groups, the ANCOVA technique was applied.

15. The null hypothesis states that there is no significant difference in the post test adversity quotient scores (AQS), when difference in the pre test scores of the groups have been controlled. The technique used is ANCOVA, F ratio was obtained to test the effectiveness of the treatment on the post test AQS and t ratio was obtained to compare the effect of the treatment on the post test AQS when the pre test AQS of the two groups are controlled. The obtained 't' value of the post test scores of the AQS is 40.74 which is greater than the tabulate 'd' value of 2.66 at 0.01 level. Thus there is a significant effect of the treatment on the post test scores of the AQS when differences in the pre test scores of the two groups have been controlled. Hence the null hypothesis was rejected.
16. The null hypothesis states that there is no significant effect of the adversity quotient enhancement program on the adversity quotient scores ( AQS) of the experimental group. The technique used is Wolf's Formula. The obtained effect size is 1.85 which is positive, significant and high in magnitude.

## CONCLUSIONS OF THE STUDY

### PHASE I

1. There is significant difference in the TAQS, CDS, ODS and RDS of unaided and aided schools. The mean scores of TAQS, CDS, ODS and RDS of aided schools were higher than that of unaided schools. However there is no significant difference in the EDS of students on the basis of school types. The mean scores of EDS of unaided schools was higher than that of aided schools.
2. There is no significant difference in the ASCS of unaided and aided schools. The mean scores of ASCS of aided schools is higher than that of unaided schools.
3. There is no significant difference in the AMS of unaided and aided schools. The mean scores of AMS of aided schools is higher than that of unaided schools
4. There is significant gender difference in the ODS of students. However there is no significant gender difference in the TAQS, CDS, RDS and EDS of students. The mean scores of girls is higher than the boys for TAQS, CDS and ODS. Whereas the mean scores of the boys is higher than the girls for RDS and EDS.
5. There is significant gender difference in the ASCS of students and the mean scores of girls were higher than the boys.
6. There is significant gender difference in the AMS of students and the mean scores of girls were higher than the boys.
7. There is significant relationship between AQS and ASCS for total sample of students, boys and girls. The obtained 'r' for girls is higher than that of the boys. There is a significant gender difference in the relationship of AQS and ASCS.
8. There is significant relationship between AQS and AMS for total sample of students and girls.
9. There is a significant relationship between AQS and SESS for total sample of students and girls.
10. There is a significant relationship between AMS and ASCS of total sample of students.
11. There is a significant relationship between ASCS and SESS of total sample of students.

12. There is a significant relationship between AMS and SESS of total sample of students.
13. There is a significant and positive combined relationship of ASCS, AMS and SESS with AQS.

## **PHASE II**

14. There is a significant difference in the pre test AQS between the experimental and control group.
15. There is a significant difference in the post test AQS between experimental group and control group when differences in pre test scores of the two groups have been controlled.
16. There is significant effect of the adversity quotient enhancement program on the adversity quotient scores of the experimental group.

## **SUGGESTIONS FOR FURTHER STUDY**

The present research study was conducted to discover knowledge in a new area and aimed at developing a theory. However, this research is only a humble effort in this direction. It has managed, nevertheless to open new areas for research. The researcher suggests some areas of research which will help in furthering exploring adversity quotient as a new science for human development.

- Research can be carried out on the decision making ability of students and adversity quotient.
- Experiments to study the effect of adversity quotient on student achievement can be conducted.
- Research can be carried out on exploring the relationship between adversity quotient of teachers and students.
- Research can be carried out to study the relationship between the adversity quotient of students and their choice of careers.
- Experiments to study the effect of adversity quotient on school performance at various levels for teachers, principals and students.

- Research to study the relationship between adversity quotient and upbringing w.r.t parent's qualification, home environment, peer influence.
- Programs to enhance the adversity quotient for students, teachers, and principals can be conducted experimentally
- Research can be carried out to study the adversity quotient of high scorers and low scorers and their choice of career

Adversity quotient is known to be a global predictor of success. Studies in the corporate sector have given useful insight into this. It works on our psychosocial resources and influences the way we feel about ourselves and others. It builds our self confidence and plays an important role in promotion of mental wellbeing which contributes to motivation and prevention of all forms of health or behavioural problems. The researcher believes that her research has in its own humble way shown the direction for researchers in the field of education to explore this global predictor of success to empower our generation next to reach its full potential, enabling them to create a world of equality, justice and peace.

## REFERENCES

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- <sup>1</sup> UNESCO: EFA and the Global Monitoring Report. Retrived from [www.unesco.org/new/en/education/themes/...the.../education-for-all](http://www.unesco.org/new/en/education/themes/...the.../education-for-all). on 15th May 2011
- <sup>2</sup> UNESCO: Education, Retrived from [www.unesco.org/new/en/education/.../education-for-all/efa-goals/](http://www.unesco.org/new/en/education/.../education-for-all/efa-goals/). on 15<sup>th</sup> May 2012
- <sup>3</sup> UN(DESA): WHO Policy Analysis Mental Health Development. Retrived from [http://www.who.int/mental\\_health/policy/mhtargeting/mh\\_policyanalysis\\_who\\_undesa.pdf](http://www.who.int/mental_health/policy/mhtargeting/mh_policyanalysis_who_undesa.pdf). in May 2012
- <sup>4</sup> ibid no.3
- <sup>5</sup> Stoltz, P.G( 1997): Adversity Quotient: Turning Obstacles into opportunities, United States, John Wiley & sons
- <sup>6</sup> Mc Clelland , D: David C Mc Clelland's Motivational Needs Theory. Retrived from [www.businessballs.com > leadership/management](http://www.businessballs.com/leadership/management) on 20/04/12
- <sup>7</sup> Mc Grew, K : Beyond IQ A model of Academic Competence & Motivation ; Academic Self-Concept: Definition and Conceptual Background Retrived from [www.iapsych.com/acmcewok/Academicself-concept.html](http://www.iapsych.com/acmcewok/Academicself-concept.html) on 28/07/12
- <sup>8</sup> Zill et al: Approching Kindergarten: A look at Pre schoolers in the United States.Young Children Vol 51, Nov, pp 35 -38. Retrived from <http://ceep.crc.uiuc.edu/eeearchive/digests/1995/zill95.htm> on 12/12/11
- <sup>9</sup> Sachdeva, P: A Study of the Effectiveness of an Intervention Program to develop Adversity Quotient of potential leaders, Ph.D thesis, SNTD University, 2009
- <sup>10</sup> Almeida A: A program to enhance the Adversity Quotient of Junior College Students, University of SNTD, 2009
- <sup>12</sup> D'Souza, R : A Study of Adversity Quotient of Secondary School Students in Relation to School Performance and School Climate; unpublished. M.Ed dissertation,2006
- <sup>13</sup> Verma,S et al : Effective Coping Strategies prevalent in College, Journal of Psychological Researches, Jan – May 1995,Vol 39,No.1 &2, p.7 -13
- <sup>14</sup> Patdo,V et al ( 2011): The Adversity Quotient of Parents with Special Children and Adversity Quotient of Parents with Normal Children. Retrived from [www.peaklearning.com/documents/peak\\_GRI\\_patdo.pdf](http://www.peaklearning.com/documents/peak_GRI_patdo.pdf). on 23/04/11

- <sup>15</sup> Huijan, Z( 2009): A Study of Adversity Quotient and Academic Performance among College Students at St.Joseph College.Quezoncity. Retrived from [http://www.peaklearning.com/documents/grp\\_research.html](http://www.peaklearning.com/documents/grp_research.html). on 26/04/09
- <sup>16</sup> Villaver, E(2005): A Study Adversity Quotient Levels of Female Grade School Teachers of a Public and Private School in Rizal Private Province Retrived from [http://www.peaklearning.com/documents/grp\\_research.html](http://www.peaklearning.com/documents/grp_research.html). on 26/04/09
- <sup>17</sup> Williams, Mark(2003): A Study of the Relationship between Principal's Response to Adversity And Student's Achievement. Retrived from [Http://Www.Peaklearning.Com/Documents/Grp\\_Williams\\_Dissertation.Pdf](http://Www.Peaklearning.Com/Documents/Grp_Williams_Dissertation.Pdf). On 26/04/09
- <sup>18</sup> Abejo: A Study Of Adverity Quotient Profile Of Employees Of College Of Arts, Science Of St.Joseph's College. Retrived from mayleng.wikispaces.com/literature+review+final on 26/04/09
- <sup>19</sup> Waayman, J.C ( 2002) : The Utility of Educational Resilience in School Dropouts for Degree Attainment. Journal of Educational Research, Jan – Feb 2002, Vol.95,No.3; p.167
- <sup>20</sup> Ollendick,T.H et al: A Study on Fear in Children and Adolescents, Relations with Negative Life Events, Attributional Style and Avoidant Coping, Journal of Child Psychology & Psychiatry&Allied Disciplines, Nov 2001, Vol.42, No.8,p.1029-1034
- <sup>21</sup> Dela Fuente et al (1999): An Exploratory Study on the Adversity Quotient Profile of the Graduating Students of Assumption College. Retrived from [http://www.peaklearning.com/documents/grp\\_DelaFuenteandLee\\_dissertation.pdf](http://www.peaklearning.com/documents/grp_DelaFuenteandLee_dissertation.pdf). on 22/11/11
- <sup>22</sup> Fergusson,D; Lynskey,M: Adolescence Resiliency To Family Adversity, Journal Of Child Psychology, Psychiatry & Allied Disciplines, 1996; Vol37, No 3, p. 281 -292
- <sup>23</sup> D'Souza G (2009): A Study of Academic Stress in Relation to Academic Self Concept, , Locus Of Control, Self Efficacy and Socio-Economic Status, Ph.D thesis, University of Mumbai.
- <sup>24</sup> Hangal,S et al : Self Concept, Emotional Maturity and Achievement Motivation of Adolescent Children of Employed Mothers and Homemakers. Journal of the Indian Academy of Applied Psychology, January 2007, Vol. 33, No.1; p. 103 -11
- <sup>25</sup> Aziz,S et al : Relationship of Responsibility and Academic Self Concept with Drug Addition among University Students. Journal Of The Indian Academy Of Applied Psychology. Jan –July 1997, Vol.23, No.1 -2; p.37 -41

- <sup>26</sup> Dixit, S. K et al : Research on Correlates of Achievement- Abstracts in the Fifth Survey of Research in Education, New Delhi; NCERT p. 1871 – 72
- <sup>27</sup> Ramaswamy, R.:ibid, p. 1903
- <sup>28</sup> Sullivan,A: A Longitudinal Study of Academic Self-Concept, Gender and Single-Sex Schooling in the 1970 British Cohort Study. Retrived from [www.cls.ioe.ac.uk/library-media%5Cdocuments%5CAS-wp-aug06.pdf](http://www.cls.ioe.ac.uk/library-media%5Cdocuments%5CAS-wp-aug06.pdf). on 16/06/09
- <sup>29</sup> Zen, T; et al : The Influences of the Academic Self-Concept on Academic Achievement from the Perspective of Learning Motivation Retrived from [http://www.iea.nl/fileadmin/user\\_upload/IRC2008/Papers/TIMSS\\_Science/Jen\\_Chien.pdf](http://www.iea.nl/fileadmin/user_upload/IRC2008/Papers/TIMSS_Science/Jen_Chien.pdf). on 09/07/09
- <sup>30</sup> Marsh, et al ( 2005) : Academic Self Concept, Interests, Grades and Standardized Test Scores: Reciprocal Effects Models of Causal Ordering, Child Development, Vol 76, No. 2, March 2005;pp 397 – 416. Retrived from <http://www.ingentaconnect.com/content/bpl/cdev/2005/00000076/00000002/art00007> on 12/10/11
- <sup>31</sup> DuPlessis,A et al: Diagnostic Instrument for Determining the Academic Self Concept of Tsonga Speaking Learners in Grade 7, South African Journal Of Education 2001, Vol.21,No.1; p.55 -64. Retrived from [http:// cat.inist.fr/2aModele = afficheN&Cpsidt=1164007](http://cat.inist.fr/2aModele=afficheN&Cpsidt=1164007). [www.self.ox.ac.uk/Conferences/2002\\_CD\\_du\\_Plessis\\_ & Bouwer.pdf](http://www.self.ox.ac.uk/Conferences/2002_CD_du_Plessis_&_Bouwer.pdf) on 09/07/09
- <sup>32</sup> Byer, et al: Consistency Correlation between Student’s Perceptions of Classroom Involvement and Academic Self Concept in Secondary Social Studies Classes. Journal Of Social Studies Research, Spring 2002. Retrived from <http://www.eric.ed.gov/PDFS/ED457207.pdf> on 13/06/10
- <sup>34</sup> Zisk,J: The effects of cooperative learning on academic self-concept and achievement of secondary chemistry students.Retrived from <http://www.sciteched.Org/researches/research/Dis.htm>. on 23/04/11
- <sup>35</sup> Alam,M.M: Academic Achievement in Relation to Creativity and Achievement Motivation- A Correlational Study. Edutracks,2009,Vol.8,No.9, p.31 – 33
- <sup>36</sup> Shaikh,F.M : A Study of Time Management among Student-Teachers in Relation to their Relation to their Achievement Motivation and Personality, University of Mumbai, Unpublished dissertation
- <sup>37</sup> Shaharas, P.V: To Ascertain The Relationship between Achievement Motivation and classroom Climate as Perceived by Students, University of Mumbai, Unpublished

- <sup>38</sup> Ramachandra: A Study of Achievement Motivation of Secondary School Students on the Basis of their Parental Educational Background, University of Mumbai, Unpublished dissertation
- <sup>39</sup> Shaikh ,R : A Study of Anxiety and Achievement of Students in Relation to their School and Home Environment, SNDT University, Unpublished dissertation
- <sup>40</sup> Padhi,J.S : Classroom Environment and Achievement Motivation. The Educational Review, 1997, Vol.Ciii, No. 7:P.117
- <sup>41</sup> Sai Geetha, P & Karunanidhi, S: Religious Attitude, Locus of Control and Achievement Motivation of Students belonging to different Religions. Journal of Psychological Researches, 1995, Vol.39, No.1; p.51 – 55
- <sup>42</sup> Lam et al : The effects of competition on achievement motivation in Chinese classrooms. British Journal of Educational Psychology, Vol 74, Iss 2, June 2004, p. 281 – 296 Retrived from onlinelibrary.wiley.com, on 10/11/11
- <sup>43</sup> Neumeister, K.L.S: Understanding the Relationship Between perfectionism and Achievement Motivation in Gifted College Students Gifted Child Quaterly Summer 2004, Vol.48, Iss.3, pp.219 -231
- <sup>44</sup> Verkutyen - Achievement Motivation and Academic Performance Among Turkish Early and Young Adolescents in the Netherlands. Genetic, Social and General Psychology Monographs, 2001, Vol 127, Iss (4), p.p 378 - 408 Retrived from [www2.uni-jena.de/svw/igc/.../Verkuyten%26Thijs%26Canatan.pdf](http://www2.uni-jena.de/svw/igc/.../Verkuyten%26Thijs%26Canatan.pdf) on 07/06/2012
- <sup>45</sup> Mc Ewan: Achievement motivation, anxiety and academic success in first year Master of Nursing students. Nurse Educ Today, July 1999, Vol 19, Iss 4, pp 19 -30. Retrived from <http://www.ncbi.nlm.nih.gov/pubmed/10693489> on 13/05/12
- <sup>46</sup> Adsul, R.K; Kamble, V: Achievement Motivation as a function of Gender, Economic Background and Caste Differences in College students, Journal of the Indian Academy of Applied Psychology, July 2008, Vol 34, No.2, pp.323 -328
- <sup>47</sup> Akre: A study on the impact of socio- economic status upon attitude towards mathematics. Indian Journal of Psychometry in Education, 2008, Iss. 39(1), p.p 78 – 80
- <sup>48</sup> Sucharita Parida: A Study of the Effect of Socioeconomic Status, School Environment and Medium Of Instruction on the Mental Abilities and Academic Achievement of School Children. Retrived from [www.educationinindia.net/download/Research\\_Abstracts.pdf](http://www.educationinindia.net/download/Research_Abstracts.pdf). on 07/01/12.
- <sup>49</sup> Archana Kumari: A study on a study of impact of computer education on the scientific attitude of students. Retrived from [www.educationinindia.net/download/Research\\_Abstracts.pdf](http://www.educationinindia.net/download/Research_Abstracts.pdf). on 07/06/09

- <sup>51</sup> Shinde S – A Study of “Socio Economic Life and Rehabilitation Problem from Sanjay Gandhi National Park – Borivili”, Unpublished Dissertation Dept. Of Economics, SNDT
- <sup>52</sup> Akhtar,Z: Language in India Strength for Today and Bright Hope for Tomorrow, Vol. 11, Iss.. Retrieved from [www.languageinindia.com/june2011/zarinalearningstylefinal.pdf](http://www.languageinindia.com/june2011/zarinalearningstylefinal.pdf) on 03/12/11.
- <sup>53</sup> Muola, J.M: A Study of the Relationship between Academic Achievement Motivation and Home Environment among Students of Standard Eight. Educational Research and Reviews Vol. 5 (5), pp. 213-217, May, 2010. Retrieved from <http://www.academicjournals.org/ERR2> ISSN 1990-3839 © 2010 Academic Journals on 02/12/11
- <sup>54</sup> Gorard, Stephen;See, B;Beng, Huat : A Study of the Impact of Socio-Economic Status on Participation and Attainment in Science. Retrieved from <http://www.eric.ed.gov> on 02/05/09
- <sup>55</sup> Leonard,Eet al : A Study of the Relationship between Mississippi Accreditation Ranking and Socio-Economic Status of Student Populations in Accredited Schools. Retrieved from <http://www.eric.ed.gov> on 12/12/11
- <sup>56</sup> Black, et al ( 2008) A Study between Socio-Economic Status and Lexical Development. Retrieved from <http://www.eric.ed.gov> on 01/05/09
- <sup>57</sup> Angela, P et al: The Association Between Parental Socioeconomic Status (SES) and Medical Students’ Personal and Professional Development. Retrieved from [www.annals.edu.sg/pdf/36volno9sep2007/v36n9p735.pdf](http://www.annals.edu.sg/pdf/36volno9sep2007/v36n9p735.pdf) on 11/10/11
- <sup>58</sup> Alam,M.M(2009): Academic Achievement in Relation to Creativity and Achievement Motivation- A Correlational Study. Edutracks, Vol. 8, No. 9; pp.31 -33
- <sup>59</sup> Op.cit no. 12
- <sup>60</sup> D’Souza G (2009): A Study of Academic Stress in Relation to Academic Self Concept, Locus Of Control, Self Efficacy and Socio-Economic Status, Ph.D thesis, University of Mumbai.
- <sup>61</sup> Shaharas, P.V: To Ascertain the Relationship between Achievement Motivation and Classroom Climate as Perceived by Students, University of Mumbai, Unpublished