

Gender Differences in Achievement Motivation and Academic Self Concept of SSC Board Students

Mary Devakumar

Pillai College of Education and Research, Chembur, Mumbai, Maharashtra, India

Abstract

Times have changed but gender differences continues in the minds and deeds of men. Even after 68 years of independence, women still continue to face discrimination at all spheres of life. This discrimination is leading to wastage of precious human resource - women force, whose talents, capabilities are lying untapped and unused. This study aimed to study if women (girls) still are 'weaker or incapable' as they were earlier termed to be in terms of physical, intellectual and emotional strengths. Have the changing times, educational accessibility and media exposure brought in change in the mindset of boys and girls?, do girls possess equal or more abilities than boys?, are they able to face challenges as effectively as their counterparts?. All these questions led to study 806 (473 boys and 333 girls) students of std 8th from SSC board schools of Greater Mumbai. The descriptive method of the comparative type was employed. The statistical technique used was 't' test and ω^2 - estimate. The results revealed that there was significant difference in achievement motivation scores where the girls scored higher than the boys. On the contrary, there was very minimal difference in the academic self concept scores on the basis of gender.

KEYWORDS: achievement motivation, academic self concept, gender differences, challenges, self concept etc.

Introduction:

In the present competitive world everybody desires to be an achiever. Today's modern society expects everyone to excel in their field. Quality of performance is now considered as a key factor for personal progress and national development. A modern democratic society cannot achieve its aim of economic growth, technical development and cultural advancement without fully harnessing the talents of its citizens.

A talented citizen is often nurtured given the proper environment, guidance and facilities without which its talents remain hidden or suppressed. In order to harness the innate capacities of any individual to its fullest, there is a need to firstly motivate him and create in the individual the drive to carry out the task successfully or achieve. Quality in performance or desire to achieve or excel is no easy task, it requires a lot of determination and self confidence to face the challenges that come in the way. For an adolescent the most important challenge is excelling in one's academics (curricular or co-curricular), which is often the measure of his capabilities. This leads us to the concept of academic self concept. Since developing a good academic self concept also needs motivation to achieve initially, they may both play their roles as cause or effect in an individual's life.

Before we embark on academic self concept, it is important to understand the concept of self concept from which stems academic self concept. Self concept is a construct within psychology and education because it provides a gauge to determine the effects of academic and social functioning on the emotional well being of the individual (Vaughn et

al 2001). It can also be termed as a basic factor in the development of personality for it emerges out of the life experiences of an individual. It is considered as a person's perception of himself in all possible respects (Munn, 1967). 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). Since children spend a significant portion of their lives being evaluated in school classrooms, self-worth theory postulates that a key to developing and maintaining self-worth is to develop and maintain a positive academic self-concept .

Achievement motivation is basically the motivation to achieve. It is an internal process that makes a person move towards a goal. Motivation may be extrinsic or intrinsic or both. According to Abraham Maslow's hierarchy of needs theory, people are generally tend to achieve higher needs only when their lower needs are satisfied. These needs may be innate or learned. A learned need is one which determined by our values. However both learned and innate needs are influenced by our environment and culture.

One theory of Achievement Motivation proposed by Atkinson and Feather (1966). They stated that a person's achievement oriented behavior is based on three parts: the first part being the individual's predisposition to achievement, the second part being the probability of success, and third, the individual's perception of value of the task.

David McClelland is most noted for describing three types of motivational need, which he identified in his 1961 book, 'The Achieving Society':

- **Achievement motivation (n-ach)** The n-ach person is 'achievement motivated' and therefore seeks achievement, attainment of realistic but challenging goals, and advancement in the job. There is a strong need for feedback as to achievement and progress, and a need for a sense of accomplishment.
- **Authority/power motivation (n-pow)** The n-pow person is 'authority motivated'. This driver produces a need to be influential, effective and to make an impact. There is a strong need to lead and for their ideas to prevail. There is also motivation and need towards increasing personal status and prestige.
- **Affiliation motivation (n-affil)** The n-affil person is 'affiliation motivated', and has a need for friendly relationships and is motivated towards interaction with other people. The affiliation driver produces motivation and need to be liked and held in popular regard. These people are team players.

McClelland said that most people possess and exhibit a combination of these characteristics. Some people exhibit a strong bias to a particular motivational need, and this motivational or needs 'mix' consequently affects their behaviour and working/managing style.

Thus we see that achievement motivation and academic self concept are both important factors in any students lives and may be the cause or effect or vice versa.

Need:

In a country like ours where patriarchal pattern still continues in most of the states, boys and girls are given different treatment when it comes to the choice of subjects for a career or participating in sports or adventurous activities in schools or colleges. The reason being that girls do not possess the physical or mental endurance or abilities to sustain themselves given the choice of activities. Hence the researcher felt the need to study if there exist any gender difference in their achievement motivation and academic self concept of adolescents.

Aim:

- To study the gender differences in achievement motivation among SSC board students.
- To study the gender differences in academic self concept among SSC board students.

Definition :

Achievement motivation: An achievement motive is described as an impulse to master challenges and reach a high standard of excellence.

Academic self concept : An individual's perception of self-efficacy in academic subjects (Bong & Skaalvik, 2003). Academic Self-Concept (ASC) can also be termed as the personal beliefs someone develops about their academic abilities or skills

Review of related Literature:

Achievement motivation:

Alam, M.M.(2009) 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,R.(2000) 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

Lam, Yim, Law & Cheung (2004) 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) 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) 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) 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.

Academic Self Concept:

D'Souza, G (2009) 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) 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

Sullivan,A (2009) 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) 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) 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) 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) 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.¹

Sample and Methodology:

806 students from SSC Board schools were taken comprising of 473 boys and 333 girls. The methodology adopted was descriptive of the causal comparative type. Over 15 schools were covered all over greater Mumbai.

Hypothesis 1:

The null hypothesis states that there is no significant gender difference in the achievement motivation scores of students.

The statistical technique to test this hypothesis is 't' test and ' ω^2 '.

The following table shows relevant statistics of the AMS of boys and girls

Table 1.

Statistics of AMS of Boys and Girls

Interpretation of 't'

The obtained 't' = 6.35 for gender differences in AMS is greater than 2.57 at the 0.01 level of significance. It is significant; hence the null hypothesis is rejected.

Conclusions:

There is significant gender difference in the AMS of students at 0.01 level of significance. The AMS of boys and girls differ significantly. The mean score of girls is higher than the boys. 4.65 percent variance in gender is associated with AMS of students.

Discussions

There is significant difference in the achievement motivation scores of boys and girls. The mean scores of girls is higher than the boys. Studies by Chandra shekhar and Rachnadevi (2012), Badia,F(2011) reported gender differences in achievement motivation. Liu and Zhu (2009) revealed that boys rank high on achievement motivation than girls, however these findings may vary from society to society. Parents in a patriarchal society may emphasise more on boys to achieve better in curricular or co curricular activities which is why we see such results. However the trends seems to be changing and educated or uneducated parents have begun so see boys and girls as equal and lay equal emphasis of preparing their children for studies or life which motivates them to achieve. Similar findings were seen by Fontayne et al (2001) where Maghrebian girls did better scholastically instead of sports as their choices were determined by transition of their society from a traditional to a medieval one. While on the other hand, the same study also revealed about no gender difference in social domain evidently because women these days are also encouraged to participate in sports. Moreover girls nowadays, are more aware and have their aspirations in place which helps them to achieve with their own efforts as reported by National center of education statistics (2004), Shah,V (2009). Also studies by Riffat et al (2011) found that girls did better in mastery and performance goals. This may probably be the reason for higher mean scores of girls.

Fig 1.a

Comparison of Mean Scores of AMS of Boys and Girls

Fig 1. b

Proportion of Variance in Gender Associated with AMS

Hypothesis 2:

The null hypothesis states that there is no significant gender difference in the academic self concept scores of students.

The statistical technique to test this hypothesis is ' t ' test.

The following table shows relevant statistics of the ASCS of boys and girls

Table

Statistics of ASCS of Boys and Girls.

Interpretation of 't'

The obtained 't' = 2.15 for gender differences in ASCS is greater than 1.96 at the 0.05 level of significance. It is significant; hence the null hypothesis is rejected.

Conclusions:

There is significant gender difference in the ASCS of students at 0.05 level of significance. The ASCS of boys and girls differ significantly. The mean score of girls is higher than that of the boys. 0.45 percent variance in gender is associated with ASCS of students.

Discussions:

There are varied results of academic self concept of boys and girls. Studies by Baran, M and Maskan, K (2011) and Shah, V (2009) revealed that there is no gender difference in academic self concept. While the present study shows a significant difference in the academic self concept scores of boys and girls. It is known that a good academic self concept stems from a good self concept. Only when an individual possess a positive self concept, does he feel good about himself and begins to discover and trust his abilities and talents. These new found talents or abilities enables him to reach a new high in his life and is motivated. They gain increased cognitive and intuitive abilities, enjoy independence of thoughts and action and begin to shoulder new responsibilities to excel in certain spheres. As a student, academic performance is the first thing on which a student is usually rated, and respected. Hence they harp on developing this area by excelling in one or more subjects of their liking, this leads to an increased academic self concept. However girls tend to put in more efforts to prove themselves equal to boys or better than them, which may be a probable reason for significant difference in the academic self concept scores of boys and girls. Also studies by Riffat (2011), Pehlivan and Koseoglu (2010) and Dai et al (1998) reveal similar results of girls possessing a better academic self concept than boys. Also, Aal - Hussain Abdulqader (1991) revealed, girls having higher self concept in Maths, general academics and physical appearance, whereas boys have a higher self concept of physical a

Fig. 2 a

Comparison of Mean Scores of ASCS of Boys and Girls

Fig 2 b

Proportion Variance in Gender Associated due to ASCS

Tying up:

It is observed that though there was very minimal difference in the academic self concept among boys and girls, the difference is significant in the case of achievement motivation. The girls are known to possess better achievement motivation than the boys. This clearly indicates that given the right direction and motivation, girls are bound to show exceptional results in any spheres. There is a need to change the perspective among parents, educationists and society. One of the most important psychosocial variables of this study which is responsible more than that of the other variables in determining one's level of achievement is achievement motivation. Therefore the situations in the home and in school should promote the need achievement of the pupil. In the context of the result in the present investigation the following recommendations have been made.

Emphasis on intellectual pursuit - Need achievement can be raised if the students develop their level of intelligence. Level of intelligence can be raised by encouraging the

students to develop the problem solving ability, thinking, reasoning etc. by participation in different activities and studying the creative work of different persons. The school should organise activities like seminars, talks delivered by the intellectuals, debates, discussions etc. and should also encourage access to right information through newspapers, journals, periodicals.

Affectionate parental behaviour - Achievement motivation is also influenced by the parental behavior. Parents should be affectionate enough. They should listen and understand all the queries, problems and needs of their children and should try to answer and solve them. They should encourage the children to face the challenges of life. But they should not be over affectionate to sons which may spoil them and may lower their daughter's self concept. They should be permissive and should encourage them to be flexible, fearless and perceive the correct knowledge only after scientific and objective investigation.

Development of level of aspiration - Pupils should be encouraged to nurture high level of aspiration. High level of aspiration is responsible for developing high need achievement. The teacher and the parents should set high goals before the students so that they should try to achieve them and they should develop the tendency to achieve more and more. But care must be taken that the goals should be set up keeping in mind the age, intellectual standard and socio economic conditions or else it will have negative impact upon the children and may block their achievement.

Removal of prejudices and biases - Conservative attitudes, prejudices attached to different situations and objects are responsible in reducing the achievement motivation. The attitude of the people attached with the resistance of girls education or participation in social activities, preconceived ideas about the quantity and quality of education often cause to reduce the achievement motivation in students. So care must be taken to free oneself of such prejudices and biases.

Scope for training for enhancing achievement motivation - Achievement motivation can also be enhanced by properly planned training programme. Workshop training, refresher courses, in service training courses should be provided for the teachers to help them to equip with necessary skills and competencies to enhance student's achievement motivation

The nation needs both men and women of caliber to contribute to the development of the country. Hence men and women both need to be given the due facilities and training to take up vocations and professions which will add to the nation's economical, technological and cultural progress. Only when the men and women population are physically and emotionally stable, satisfied and content can they cherish democratic values and be an asset to the society by contributing effectively and efficiently to the nation's growth and development.

References:

- 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
- Alam,M.M: Academic Achievement in Relation to Creativity and Achievement Motivation- A Correlational Study. Edutracks,2009,Vol.8,No.9, p.p.31 – 33
- 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
- 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
- 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.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 on 09/07/09
- 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.p.103 - 11
- 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
- Mc Clelland , D: Motivational Needs Theory. Retrived from [www.businessballs.com](http://www.businessballs.com/leadership/management) › leadership/management on 20/04/12
- 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 on 28/07/12.
- Shaikh ,R : A Study of Anxiety and Achievement of Students in Relation to their School and Home Environment, SNDT University, Unpublished dissertation
- 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. on 16/06/09

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. on 09/07/09

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

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 on 07/06/2012

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

TABLES OF THE RESEARCH PAPER

Table 1
Statistics of AMS of Boys and Girls

Variable	Group	N	M	SD	t value	L.O.S	100ω ²
AMS	Boys	473	135.49	17.96	6.35	0.01	4.65
	Girls	333	143.49	17.31			

df = total N – 2 = 806 – 2 = 804.

From Table D, for df = 804.

L.O.S = level of significance.

Tabulated t = 1.96 at 0.05 level.

NS = Not Significant.

Tabulated t = 2.57 at 0.01 level.

Table 2

Statistics of ASCS of Boys and Girls.

Variable	Group	N	M	S D	t value	L.O.S	100ω ²
ASCS	Boys	473	137.86	18.64	2.15	0.05	0.45
	Girls	333	140.74	18.75			

df = total N - 2 = 806 - 2 = 804

From Table D, for df = 804

L.O.S = level of significance

Tabulated t = 1.96 at 0.05 level

NS = Not Significant

Tabulated t = 2.57 at 0.01 level

Figures of the research paper

Fig 1.a

Comparison of Mean Scores of AMS of Boys and Girls

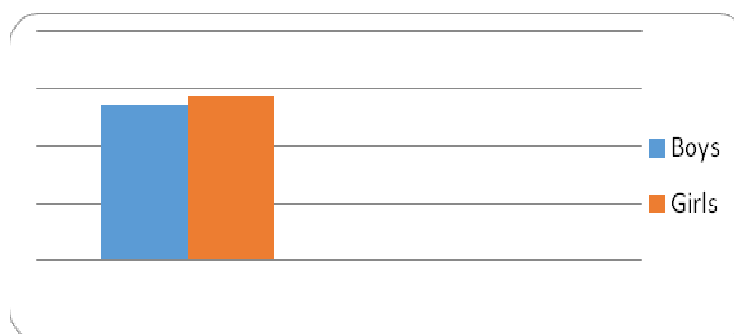


Fig 1. b

Proportion of Variance in Gender Associated with AMS

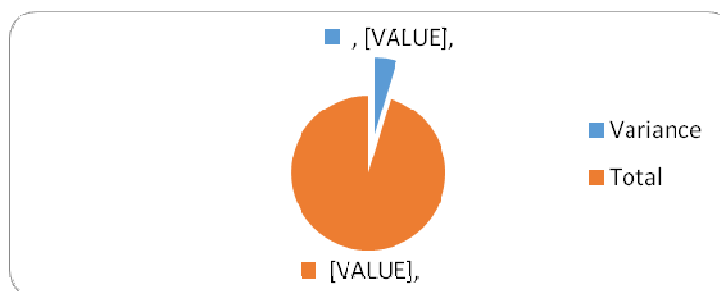


Fig. 2 a
Comparison of Mean Scores of ASCS of Boys and Girls

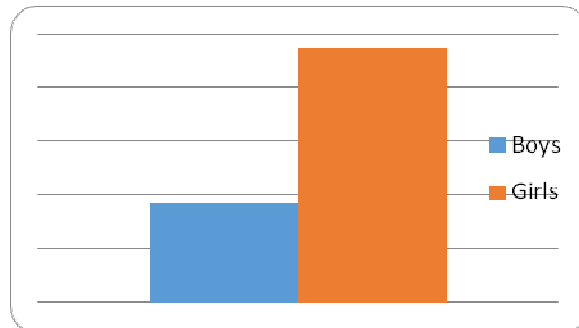


Fig 2 b
Proportion Variance in Gender Associated due to ASCS

