



A Study on Exploring the Nature of Relationship between Achievement Motivation & Gender-role identity of Undergraduate First-year College Students

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Abstract: The present study aimed to investigate whether there was any significant relationship between gender-role identity & achievement motivation of undergraduate first-year college students. In this survey study, the investigator used multistage stratified random sampling technique for selecting the sample from the population. The stratifications were done in various stages on the basis of locality & gender of students. The sample consisted of 600 (300 male & 300 female) undergraduate first-year students from several colleges affiliated under Calcutta University in Kolkata District, West Bengal, India. The tools used for the present study were Indian Gender Role Identity Scale-B (IGRIS-B) developed by Jayanti Basu, Subrata Dasgupta, Urmi Chakraborty & Sipra Basu, (2012) and Achievement Motivation (n-Ach) scale constructed by Dr. Pratibha Deo (Pune) and Dr. Asha Mohan (Chandigarh) in 1985. The statistical techniques used for analyzing the data for the present study were Mean, S.D., Z-scores to find out whether there existed any significant mean-difference between two sexes across the two variables & Karl Pearson's product moment co-efficient of correlation to assess the nature of relationship between these two variables under study. The findings revealed that, there existed a significant biological sex difference in terms of the two variables & there was a significant relationship between gender-role identities of undergraduate first-year students in relation to their achievement motivation.

Keywords: achievement motivation, masculinity, femininity, emerging adults.

INTRODUCTION:

The concept of achievement motivation was first systematically studied by McClelland (1953) and his associate, though the concept of achievement motivation actually originated by Murray (1938). McClelland et al (1959) defined achievement motivation as a competition with a standard of excellence. Motivation stemming from a desire to perform well or a striving for success is called achievement motivation. Need for Achievement (n Ach) (McClelland, 1961) is one of the psychological motives that plays an important role in success and achievements of a person. Therefore, the word achievement motivation is sometimes called the need for achievement, the need for independence, competence of

performance, positive social reinforcement, mastery, curiosity, manipulation drive & so on. Everyone has a need to achieve and a fear of failure, but these needs vary from person to person and from situation to situation. Each student acts on the levels of motivation differently, but some students are predisposed to having little desire to accomplish certain tasks (Atkinson, 1999). Motivation, as it relates to students, is very important. Students who have high motivation to achieve generally do well academically. Students with low motivation do not do well academically. But motivation does not guarantee achievement. Similarly, achievement does not reflect motivation (Keefe and Jenkins, 1993). All students are influenced by a need to achieve. It causes them to want to be successful at what they attempt & be well-adjusted in society. But each student is affected to different degrees. For some students, the desire to achieve overwhelms other factors that could cause failure, such as lack of skills, lack of experience, lack of ability, or lack of time. The individual does whatever it takes to work through or eliminate these setbacks (Atkinson, 1974). (Cited in Zenzen, 2002).

Research that was performed from 1950 to 1960 pointed to the fact that women have a lower level of achievement motivation than men in accordance with the social emphasis of the time when women rather stayed at home instead of venturing into the achievement-oriented world of work. However, further research indicates that achievement motivation of women has increased over time. J. Veroff and C. Depner (ibid) found out that achievement motivation of American women increased from 1957 to 1976 and Jenkins determined an increase from 1967 to 1981. Several contemporary studies point to gender differences in achievement motivation. According to J. S. Hyde and K. C. Kling (2001), the increase of achievement motivation of women was probably caused by better opportunities to gain education and also to find employment. Similar findings were also reported by B. A. Greene, T. K. DeBacker (2004), who state in their study that in the 1960s men and women differed more significantly in long-term goals and future plans. Men expressed mainly plans concerning a career in sciences and technologies and also gaining prestige and good earnings. Women focused more on personal comfort and altruistic behaviour in the future. R. Fiorentine (ibid) in long-term research carried out in the period from 1969 to 1984 found out that the women's plans to achieve a higher status and authority have been gradually increasing over time. T. Gjesme (1979; according to B. A. Greene, T. K. DeBacker, 2004) found out a higher level of future orientation with girls, and that mainly in its anticipation and in the work place. The higher level of future orientation was related positively to the motive of success and negatively to the motive of avoiding failure. In later similar research T. Gjesme found out that female students with a low level of future orientation and with low abilities had a higher level of motivation to avoid failure.

Mrs.P.Anitha, Dr.A.Umesh Samuel Jebaseelan (2010) found that girls are significantly high in overall achievement motivation than boys. Pany (2014) studied achievement motivation of science male and science female college students which revealed the fact that science female college students are more motivated than science male students. Maheswari and Aruna (2016) found that there is significant difference between the genders of the respondents with regard to their achievement motivation. From the mean score analysis, it was revealed that female respondents perceived better achievement motivation than the male respondents. Although, there has been a recent decline in the gender gap in many achievement domains, it is clear that gender differences in achievement motivation still exist.

Students, especially those in their late teens & passing out of adolescence to young adulthood ("emerging adults"- named by Arnett, 2000) have academic success as their major goal. For this goal to be achieved, it requires dedication, sacrifices, self-discipline, motivation, and so on, which make them develop into well-educated individuals so that they can make significant contributions to the society in the future.

Emerging adulthood is a time of transition - transition from sexual immaturity to sexual maturity, from the salience of same-sex relationships to the salience of heterosexual relationships, and from a child's conception of masculinity and femininity to a growing awareness of requirements for adult gender roles.

The press of these evolving sexual and social pressures makes the establishment of gender role identity particularly significant for this college going emerging adults.

Developmental theorists have, in fact, long considered the establishment of a traditional gender- role identity, that is, masculinity in boys and femininity in girls, the major developmental task of adolescence (Erikson, 1950; Kohlberg, 1966; Mussen, 1969). Moreover, the establishment of a traditional gender-role identity has been considered essential to a positive self-image in adolescence and a precursor to psychological adjustment in adulthood (Mussen, 1969). Recently differences between men and women have existed and have been recognized long before psychologists coined terms such as masculinity or femininity. Sex-role development and its psychological and behavioural manifestations have been much investigated since the inception of psychology. Along with other societal trends, sex-role developments have progressed through the wheel of evolution.

According to gender stereotype theory, men are generally perceived as more masculine than women, whereas women are generally perceived as more feminine than men. The distinction between male & female serves as a basic organizing principle for every human culture. All societies allocate adult roles on the basis of sex & anticipate this allocation in the socialization of their children. Not only are boys & girls expected to acquire sex-specific skills, they are also expected to have or to acquire sex-specific self-concepts & personality attributes, to be masculine or feminine as defined by that particular culture (Barry, Bacon & Child, 1957). Janet T Spence & Robert L Helmreich in 1979 also reported that many individuals are shown to be appropriately sex-typed, that is, men tend to be high in masculinity & low in femininity & women the reverse.

Based on their conceptualization of gender identity, Egan and Perry (2001) looked at differences between males and females in gender identity and found substantial differences. Boys have higher scores than girls on gender typicality, gender contentedness, and felt pressure for gender conformity.

Motivation is generally defined as internal condition that stimulates, direct and maintains behaviour. Whereas, gender identity refers to the extent to which a person experiences oneself to be like others of one gender. One's sense of being male or female largely determines how people view themselves and provides an important basis for their interactions with others. There has been little research on the relationship between gender-role identity & achievement motivation of college students. However, from the available researches, it has been revealed that in a study on Sex-role identification and achievement motivation in college students, a significant direct relationship was found for both males and females between a stereotypically more masculine orientation and achievement motivation (Anne B. Stericker & James E. Johnson, 1977).

In another study on college students, findings had suggested that college students, in their pre-adulthood years, may have been raised to believe that congruent societal values, motivation to achieve is a masculine trait & hence there existed a positive correlation between masculinity & achievement motivation (Pillai, Kamala S, 1983). In another study of 176 male & female college students, the result indicated that psychological masculinity & femininity are better predictors of striving & self-concepts in the achievement & interpersonal domains than gender (Jacob L. Orlofsky & Jayne E. Stake, 1981).

The present study focused on the correlational analysis of the two variables, namely achievement motivation & gender-role identity of undergraduate first-year college students, & also the biological gender of the students was dealt with in this paper.

OBJECTIVES OF THE STUDY:

- To find out whether there is significant difference between male & female undergraduate first year honours students in respect of, achievement motivation.
- To study the significant difference, if any, between male and female undergraduate first year honours college students on their gender-role identity.
- To explore whether the two variables under study i.e., achievement motivation & gender-role identity would correlate significantly with each other for male & female students group separately.

HYPOTHESES:

- I. There will be a significant difference between male & female undergraduate first year honours students in respect of achievement motivation.
- II. Male undergraduate first year honours students will significantly differ from their female counterparts in respect of their gender role identity (i.e.- masculinity & femininity).
- III. Achievement motivation & gender role identity- the two variables of the study would correlate significantly with each other for male & female students group separately.

METHODOLOGY

Research design:

Descriptive survey research method was used for the present study.

Participants: The study group included 300 male & 300 female first year undergraduate Honours students studying in several colleges affiliated under Calcutta University. Both the groups were matched on variables- age (between 18-20 years), educational qualification, socioeconomic status & family structure. The purposive sampling technique was used.

Survey Instruments:

General Information Schedule: It elicits information about socio-demographic variables like age, sex, education, domicile, family structure and family income etc.

Achievement Motivation (n-Ach) Scale: This scale was developed by Pratibha Deo (Pune) & Asha Mohan (Chandigarh) in 1985. The scale consists of 50 items, out of which 13 are negatively scored & 37 are positively scored. The subjects are instructed to put a 'X' mark on any of the five alternatives; each positive item is to be scored 4 for always, 3 for frequently, 2 for sometimes, 1 for rarely & 0 for never; the negative item should be scored 0,1,2,3 & 4 for the same categories respectively. The total score is the summation of all the positive & negative items' scores. The test-retest reliability coefficient of the scale for boys is 0.67, for girls 0.78 & for both 0.69. The validity of this scale was established through concurrent method.

Indian Gender Role Identity Scale (IGRIS): The scale was originally constructed by Bem (1981). In this study, culturally adapted version had been used, as there may be some variations in gender role identity owing to culture. Here, a modified Indian version i.e; IGRIS B (Basu and Basu; Dasgupta, 2012) applicable for the present age group has been used. This version consists of 48 items (adjectives reflecting masculine or feminine traits). Throughout this discussion, masculinity and femininity are treated as two independent, categorical variables. Out of 48 items, 16 items reflect masculine traits, 16 reflect feminine traits and the rest 16 are buffer items. Each item is accompanied by a 7-point scale, in which '1' indicates presence of the particular trait to an extremely low degree, and '7' indicates presence of the trait to a very high degree and '4' lies in between. The reliability for the items reflecting Masculine (M) traits are as follows; for split-half reliability it is 0.88, Chronbach's alpha is 0.83 and test-retest

reliability is 0.78. The reliability for the items reflecting Feminine (F) traits are as follows; split-half reliability is 0.77, Chronbach's alpha is 0.75 and test-retest reliability is 0.79. The construct validity of the scale was found out to show that the masculine and feminine scales were orthogonal, with a correlation coefficient value of 0.08 (for IGRIS B).

Data collection & Scoring: Phase-I: A sample of 300 male & 300 female undergraduate first year Honours students was selected by using the table of random numbers & simultaneous scanning of relevant attendance registers. The principle of stratified random sampling was followed here, (Singh, 1997). Data were collected by administering the questionnaire in a compact booklet form to the students' group (after explaining purpose of the study & assuring their willingness to participate in the study), until the required number was reached (Singh, 1996).

Phase-II: Data were collected & properly scrutinized. Scoring was done by hand. After the tabulation, the data were analysed by the following Statistical Techniques:

1. Mean, Standard Deviation, to study the nature of distribution of scores.
2. Significance of mean difference between Large Independent samples (male & female) of equal sizes through Z-test.
3. Pearson's Product moment correlation coefficients, to test the nature of relationship between the variables under study namely, achievement motivation & gender-role identity (i.e.- masculinity & femininity) of undergraduate first-year college students.

RESULTS AND DISCUSSION:

The data collected in the present study is represented in the tabulated form in the table given below:

Table-I: Showing the Mean, S.D values of male and female students along with Z-test values & results for testing the significance of mean difference between male & female students on the variables under study:

Variables under study	Biological Gender	N	Mean	SD	Z-Test Values	Sig. (2-tailed) [p-Value]
Achievement Motivation	Male	300	142.350	12.088	-6.169	.000**
	Female	300	147.890	9.789		
Masculinity	Male	300	87.163	6.660	20.499	.000**
	Female	300	74.873	7.967		
Femininity	Male	300	76.456	6.311	-19.183	.000**
	Female	300	86.376	6.354		

Note: **p<0.01

Table no.I shows the mean scores, standard deviations, Z-test values and level of significance between male & female undergraduate first-year honours students in terms of achievement motivation & gender role identity (i.e., masculinity & femininity).

The z-test values for achievement motivation, masculinity & femininity had been found to be 6.169, 20.499 & 19.183, respectively at 0.01 level of significance. The computed p of .0001 for obtaining the observed mean differences between male & female students by chance of random sampling regarding these three variables were much less than the chosen α of 0.01 & were considered too low. Thus, the differences between the group means were considered significant ($P<0.01$) for achievement motivation, masculinity & femininity.

Furthermore, in depth analysis from table-I, pointed out that the mean scores of female group for achievement motivation & femininity (147.890 & 86.376, respectively) were greater; thus indicating higher achievement motivation & femininity than that of male students (142.350 & 76.456); whereas male students were high in mean scores (87.163) for masculinity than that of female group (74.873).

Therefore, *hypotheses-I & II both were accepted & it might be said from the above findings that the male undergraduate first year honours students were significantly higher than female counterparts in respect of, masculinity, but female group were significantly higher than males in terms of achievement motivation & femininity.*

The present research finding was in line with some of the existing literature. B. A. Greene, T. K. DeBacker (2004), who state in their study that in the 1960s men and women differed more significantly in long-term goals and future plans. Men expressed mainly plans concerning a career in sciences and technologies and also gaining prestige and good earnings. Women focused more on personal comfort and altruistic behaviour in the future. R. Fiorentine (ibid) in long-term research carried out in the period from 1969 to 1984 found out that the women's plans to achieve a higher status and authority have been gradually increasing over time. Times have changed, & women are now come in the frontline in several fields. A study by Mrs.P.Anitha, Dr.A.Umesh Samuel Jebaseelan (2010), have revealed that girls were significantly better than boys in overall achievement motivation. In another study by Dr. K Kavitha & M Aruna (2016) it was seen that female respondents perceived better achievement motivation than male respondents.

According to gender stereotype theory, men are generally perceived as more masculine than women, whereas women are generally perceived as more feminine than men. The distinction between male & female serves as a basic organizing principle for every human culture. All societies allocate adult roles on the basis of sex & anticipate this allocation in the socialization of their children. Not only are boys & girls expected to acquire sex-specific skills, they are also expected to have or to acquire sex-specific self-concepts & personality attributes, to be masculine or feminine as defined by that particular culture (Barry, Bacon & Child, 1957). The same picture had been found in the present study where males are significantly dominant in masculine traits & females are significantly dominant in feminine traits as depicted by their z-test values. As Janet T Spence & Robert L Helmreich in 1979 reported that many individuals are shown to be appropriately sex-typed, that is, men tend to be high in masculinity & low in femininity & women the reverse.

Table-II: Correlation Coefficients between Variables under study:

Biological Sex	N	Variables under study→ ↓	Masculinity	Femininity
Male	300	Achievement Motivation	.312**	-.368**
Female	300		.464**	-.435**

Note: ** p < .01

Above tables revealed that statistically significant positive correlations ($p < 0.01$) were there between achievement motivation & masculinity (for both sexes) implying that as achievement motivation increased, there would be an increase in masculinity significantly. There existed statistically significant ($p < 0.01$) negative correlation between achievement motivation & femininity indicating as achievement motivation increased, femininity decreased significantly for both sexes. That means, as masculinity increased for both biological sexes, their achievement motivation also increased but on the contrary, as femininity increased for both the biological sexes, their motivation to achieve decreased. Thus, *hypothesis-III was accepted and it might be said that the variables under study, namely, achievement motivation & gender role identity in terms of masculinity & femininity correlated significantly with each other for male & female students group separately.*

Literature review on correlations between these variables under study have revealed that in a study on college students, findings had suggested that college students, in their pre-adulthood years, may have been raised to believe that congruent societal values, motivation to achieve is a masculine trait & hence there existed a positive correlation between masculinity & achievement motivation (Pillai, Kamala S, 1983). In another study of 176 male & female college students, the result indicated that psychological

masculinity & femininity are better predictors of striving & self-concepts in the achievement & interpersonal domains than gender (Jacob L. Orlofsky & Jayne E. Stake, 1981).

CONCLUSIONS:

The findings of the present study indicate that the male undergraduate first year honours students were significantly higher than female counterparts in respect of, masculinity, but female group were significantly higher than males in terms of achievement motivation & femininity. And as masculinity increased for both the biological gender, students' achievement motivation also increased significantly whereas, an increase in femininity for both male & female students, there would be a significant decrease in students' achievement motivation score.

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