

## Adjustment and Self-Efficacy as Predictor of Academic Achievement Among School Students

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### ABSTRACT

The study was planned to find out the predictors of academic achievement among school students. The present study was conducted on a sample of 198 adolescents (96 male and 102 female) with age range of 16 to 18 years, who are studying in XI and XII classes. The sample was selected using stratified random sampling procedure from Rewari & Bhiwani districts of Haryana. Bell Adjustment Inventory (Hindi adaptation) Mohsin & Shamshad (1969) & Self-efficacy scale constructed and standardized by Muris, (2001) were used to collect data. Academic Achievement of the students would be considered as the average percentage of marks obtained by the students in previous two years in annual examination conducted by their respective schools and board. The data were analyzed by using Pearson's Product Moment method of correlation and stepwise regression analysis. The results revealed that (i). The correlation between adjustment and academic achievement is negative and significant. Social and emotional adjustment has significant association with academic achievement among school students. The school children with better social and emotional adjustment explain high academic achievement and vice-versa. (ii). Emotional Self Efficacy and social adjustment are found to be main predictors of academic achievement whereas these two predictors accounted for 24% of the variance.

**Keywords:** *Emotional & Social Adjustment, Self-efficacy, academic achievement*

Academic achievement is a multidimensional and multifaceted phenomenon. There are innumerable factors which effect academic achievement viz. personality, efficiency, motivation, school environment, learning, family background, socio-economic status of the parents, and many more. Quality of performance has become the key factor for personal progress. In fact, it appears as if the whole system of education revolves round the academic achievement of students through various other outcomes are also expected from the system. Thus, a lot of time and effort of the schools are utilized for helping students to achieve better in their scholastic endeavors.

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### *Academic Achievement and Self-efficacy*

Perceived self-efficacy is an individual's estimate of his capability of performing specific set of actions required to deal with environmental conditions. It has been proved to be a powerful personal resource of having impact of stress on cognitive appraisals as well as on psychological and physical well-being (Jerusalem & Mittag, 1997). Self-efficacy is a key variable of Bandura's Social Cognitive Theory (SCT) Bandura's (1986), defined as "an individual's belief in his or her own ability to organize and implement action to produce the desired achievements and results" (Bandura, 1997). Prior studies have provided strong evidence that self-efficacy is a positive predictor of performance outcomes in different subjects (Schunk et al., 2008; Usher & Pajares, 2008).

Bandura (1998) stated that most of the research conducted showed that self-beliefs of efficacy affect human functioning on psychological processes. Human behavior is regulated by forethought embodying valued goals because personal goals are influenced by self-appraisal of capabilities. Self-efficacy plays a major role in the self-regulation of motivation because most human motivation is cognitively generated and forms beliefs about what they think they can do in practically. Schunk (1986, 1989) found that self-efficacy research is viewed in domains relevant to education and several studies have addressed cognitive skills, social skills and career choices as a result shown that self-efficacy is an important construct that helps to explain students' learning and performance of academic achievement. Other studies have shown a positive relationship between students' self-efficacy capabilities and academic achievements among school and university students; those who have higher perceived self-efficacy usually have better academic achievement (John & Andrew, 2004; Namok, 2005). Few studies showed that there was low level relationship between perceived self-efficacy and academic achievement (Himanshu, Harpal & Kumar, 2017; Liu, et al., 2006). Al-Muhsin (2006) conducted a study on the relationship between self-efficacy and need for achievement as a result that adjustment showed moderate levels of self-efficacy among college students in their academic performance (Al-Saqer, 2005).

Every individual from the time he or she steps out of the family and goes to school makes a long series of adjustments between the whole unique personality and the environment. "The ardent desire of each boy and girl to become an individual person having a healthy physique, a growing intellectual ability, a greater degree of emotional poise and increased participation in social groups, such characteristics enhance one's personality" (Singh, Tripathi & Mahato, 2014). The period of adolescence is considered as crucial and significant period of an individual's life. Psychologically, adolescence is the age when the individual becomes integrated into the society of the adults. It is at this stage a child feels equal to the elders. Kulshrestha (1979) explained that the adjustment process is a way in which the individual attempts to deal with stress tensions, conflicts etc., and meet his or her needs. In this process, the individual also makes efforts to maintain harmonious relationships with the environment.

### **Rationale of the Present Study**

The present study was aim to examine the relationship of academic achievement with all the measures (academic, social and emotional) of self efficacy and areas of adjustment (home, health, social & emotional). This is also necessary to understand how and why self-efficacy and all areas of adjustment affect the level of academic achievement among school students. The generation of such knowledge explored was essential for better understanding about relationship between academic, social & emotional self-efficacy and academic outcomes with their adjustment problems among school students. The present study explores school

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children's academic achievement based on non-clinical sample in the two districts of Haryana.

### *Objectives*

The objectives of the study:

- To study the relationship between the areas of adjustment (emotional, social Home & Family) and academic achievement among school students.
- To study the relationship between the academic achievement and measures of self-efficacy among school students.
- To study the predictors of academic achievement among school students.

### *Hypotheses*

**H<sub>1</sub>**. Measures of adjustment are likely to show no relationship with academic achievement and self-efficacy among secondary school students.

**H<sub>2</sub>**. Some areas of adjustment and self-efficacy measures would significantly predict academic achievement among school students.

### *Sample*

The present study was conducted on a sample of 198 adolescents (96 male and 102 female) with age range of 16 to 18 years, who are studying in XI and XII classes. The sample was selected using stratified random sampling procedure from Rewari and Bhiwani district. Four schools were taken at random, from each school approximate equally (50) students were selected for the study. All the schools were having same educational affiliation and catered to the needs of low to high socio economic status students.

### *Tools*

Following tool was used for the collection for the relevant data:

#### **Bell Adjustment Inventory (Hindi adaptation) Mohsin & Shamshad (1969).**

In the present study, Hindi adaptation of Bell adjustment Inventory was used. Mohsin – Shamshad adaptation of Bell Adjustment inventory (Hindi adaptation) consists of 135 items, which measured adjustment among four different areas – Home, Health, and Social and Emotional adjustment. It yields separate scores as well as composite score for overall adjustment. High score on the inventory indicates low adjustment, and low score indicate high adjustment in different specific areas. The test-retest and odd-even reliabilities of the adapted ranged between .70 and .92 for different sub scales. The test-retest reliabilities coefficient and odd-even reliabilities for home adjustments were .70 and .81 respectively, for social adjustment it was .87 and .74, for health adjustment it was .80 and .82 whereas it was .93 and .93 for emotional adjustment.

**Self Efficacy Questionnaire-Muris, (2001):** The Self-Efficacy Questionnaire contains 24 items that represent three domains of self efficacy, i.e., social, academic, and emotional. Social self-efficacy deals with the perceived capability for peer relationship and assertiveness, Academic self efficacy is concerned with the perceived capability to manage one's own learning behaviour, to master academic subjects and to fulfill to the academic expectations and emotional self efficacy pertains to perceived capability of coping with negative emotions. The internal consistency reliability of the SEQ-C appeared to be satisfactory. Cronbach alpha was .88 for the total self efficacy scores and between .85 and .88 for subscale scores. The internal consistency of SEQ was also sufficient ( $r = .79$ ).

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**Academic Achievement:** Academic Achievement of the students would be considered as the average percentage of marks obtained by the students in previous two years in annual examination conducted by their respective schools and board.

### RESULTS & DISCUSSION

Pearson Product Moment correlation was used to find the correlation between the variables. It is pertinent to mention here that correlation of  $-.17$  and  $-.14$  is significant at  $.05$  level, respectively.

#### *Correlation between academic achievement and areas of Adjustment*

	Family	Health	Social	Emotional
Academic Achievement	$-.008$	$-.03$	$-.19^*$	$-.16^*$

**\*P<.05**

The correlations between adjustment (social & emotional) and academic achievement are negative. The significant negative correlation between social adjustment and academic achievement indicates that better adjustment on social status of the individual higher the academic achievement. The present results clearly show that school children who scored better on academic they explored emotionally balanced behavior. From the present study, it is confirmed that, there is a low positive relationship between emotional & social adjustment of higher secondary school students in relation to academic achievement. These findings confirm the earlier Indian studies of Surekha (2008), Mansingbhai & Yasvantbhai (2014), Kumar & Dhillon (2010), Verma, Kumar & Kumari (2016).

#### *Correlation Between Academic Achievement and Self-Efficacy*

	ASE	SSE	ESE	Self-efficacy
Academic Achievement	$.19^*$	$.103$	$.18^*$	$.17^*$

**\*p<.05**

The correlations between academic achievement and three dimensions of self efficacy (ASE, SSE & ESE) ranged between  $.10$  and  $.18$ . Academic achievement has significant positive correlation with ASE( $r=.19, p<.05$ ) and ESE( $r=.18, p<.05$ ). Total self efficacy explores positive association with achievement( $r=.17$ ) among school students (boys& girls). The results reveal that students of high on self efficacy level specially academic & emotional, show their high academic achievement and vice versa. The present results received a support from recent study by Sarikoc (2016) conducted a study to determine nursing students' academic motivation and academic self-efficacy levels. It was observed that freshmen have a higher level of intrinsic motivation than the seniors; and the extrinsic motivation of the juniors is less than all the other classes. It was determined that there is a positive self-efficacy relationship between the intrinsic motivation and extrinsic motivation levels of the students. Soon the basis of these results, it can be concluded that as academic and emotional self-efficacy increases among students so their academic achievement also increases. The results reveal those students of high on academic and emotional self efficacy level show better academic achievement and vice versa (Al-Muhsin ,2006; Bedel,2016).

The present study was an attempt to find the relationship between academic achievement and measures of self-efficacy with areas of adjustment especially in school students. It is pertinent to note that results of the study appear to lend substantial support to the hypothesis formulated. Thus, it is logical to assume that high achievers produce better beliefs about

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their capabilities and ability to perform various tasks. High achievement obviously helps students in terms of how they feel, think, and behave in various life situations which in turn reflect positively on academic and emotional self-efficacy. The current findings are consistent with the majority of the previous research on secondary and college stage students (John & Andrew, 2004; Namok, 2005).

### *Multiple Regression Analysis*

Since one of the objectives of the study was to examine relative predictive value of self efficacy and adjustment for academic achievement among adolescents, multiple regression analysis was considered as one of the most pertinent statistics. The preceding section has dealt with the degree of relationship among the measures included in the study.

**Table 2. Summary of Stepwise Multiple Regression Analysis Dependent Variable: Academic Achievement**

Step	Predictor	Multiple R	R <sup>2</sup>	R <sup>2</sup> Change	B	F	P<
1	Emotional self efficacy	.176 <sup>a</sup>	.031	.031	.159	6.190	.01
2	Social adjustment	.234 <sup>b</sup>	.055	.024	-.155	4.818	.02

The regression analysis provides an opportunity with little ambiguity to assess the importance of each of the predictors to the overall relationship. Here multiple regressions have been employed to find a subset of independent variable that is useful in predicting the dependent variable and to eliminate those which do not provide any additional predictions to the independent variables already in the equations. The model that suits this aim is stepwise multiple regression.

The stepwise regression (backward) equation starts out empty and independent variables are added in steps, one at a time, provided they meet the statistical criterion for entry (F with  $p < 0.05$ ). At each step the independent variables not in the equation with a smallest probability of F is entered. The independent variables already in the equations may be removed if they lose significant contributions towards multiple  $R^2$ . The method terminates when on more variables are eligible for inclusion or removal. The stepwise regression is the surest path to the predictions equation when one is interested in identifying a subset of potent predictors and eliminating those, which do not provide additional predictions to the predictors already entered.

The stepwise regression was applied with parameters;  $p$  of F - to- enter is .05,  $p$  of F - to- remove is .10 and, minimum tolerance is .001. The probability of F-to-enter is a test of additional predictive value of a variable taking in to account for other variables already entered. Table 2 shows the results to stepwise regression analysis for the dependent measure academic achievement in the sample of secondary school students. The results indicated that four significant predictors of achievement emerged with an overall multiple R of 0.23, which is significant at .001 probability. Emotional Self-efficacy being most pertinent predictor of achievement, it entered the equations at step one. The R for these variable equals to .176, F to entered being 6.19, it is significant at .01 probability. It indicates that ESE is a very strong predictor of achievement among adolescents. The next variable which entered in the regression equation, is social adjustment, a measure of adjustment. With the

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entry of this predictor at step two the multiple R become .23. The F ratio at this step equals to 4.8. The degree of freedom being 2/195, it is significant at 0.02 probability.

### CONCLUSION

The students studying from higher secondary schools are in a need of some psychological support from their parents as well as teachers. All the high secondary schools must give importance to providing counseling service to the students who are having adjustment problems especially in emotional and social level. A trained counselor would be beneficial for giving guidance and counseling services to the school students. The schools must not give importance only to high achievers of their students, but must give importance to teaching to adjust with oneself and with their environment.

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### **Conflict of Interest**

The author(s) declared no conflict of interest.

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