

# Self-Regulated Learning Among Undergraduate Students in Relation to Their Gender and Parental Involvement

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## ABSTRACT

Self-regulated learning refers to individual's ability in developing knowledge and skills with full responsibility and perseverance in fulfilling their learning demands successfully. Parental involvement is important predictor of student's self-regulated learning. However, previous researches conducted on self-regulated learning have focused on the school environment and has not focused on the home situation. In particular, researches on the role of parents in self-regulated learning when students enter in college have been limited. In the present study an attempt has been made to explore the self-regulated learning among undergraduate students in relation to their gender and parental involvement. To achieve the objectives of the present study, a sample of 1187 undergraduate students were selected using a random sampling technique from different government colleges of Himachal Pradesh. Self-regulated Learning Scale and Parental Involvement Scale were used for collection of requisite data from the selected subjects. Statistically data was analysed by using two-way Analysis of variance for 2x3 factorial design of the study i.e. two types of Gender i.e. male and female and three level of Parental involvement (i.e. high, moderate and low). Findings of the study reveal that there is significant effect of gender on self-regulated learning of undergraduate students. Parental Involvement has significant effect on Self-regulated learning of undergraduate students. Gender and parental involvement (in combination with each other) were not found to have significant interactional effects on self regulated learning of undergraduate students.

**Keywords:** Gender, Parental Involvement and Self-Regulated Learning Undergraduate students.

## INTRODUCTION

Learning is to a process in which a relatively permanent change in behavioural tendency occurs as a result of reinforced practice. Learning is the basic quality of all humans. It depends on processes of perception categorization, memory and so on. Self-regulated learning refers to a cognitively inherent aspect of learning which is constituted jointly by the complexity of information and information processing. An effective learner should be aware of the functional relations between their pattern of thoughts & actions, social and environmental outcomes. They also need to know how to use self-assessment to determine whether they are meeting their learning goals. One of the important aims of education is promoting higher order cognitive skills such as problem solving, decision making, self-evaluation, organizing and transforming information and so on. It is observed from the existing studies that these are components of academic self-regulation. The contemporary educational landscape demands students to become independent, proactive and reflective learners. With the increasing emphasis on autonomous learning in higher education self-regulated learning has emerged as a crucial factor in enhancing academic achievement and life-long learning skills.

## Self-Regulated Learning

Self-regulated learning refers to the process by which individuals take control of their own learning by setting goals, monitoring progress, and using strategies to improve their learning outcomes. It is an active, goal-oriented, and reflective approach where learners manage their cognitive, motivational, and emotional resources to enhance their learning experience. Self-regulated learning is an umbrella term for various processes such as goal setting, meta-cognition, and self-assessment. (Loyens et.al., 2008) Self-regulated learning describes learners, who are more mastery-oriented and tend to understand better their own learning process; therefore, they appear to be more self-motivated, strategic, and effective (Zimmerman, 1990). “Self-regulated learners are self-regulated if they are “meta-cognitively, motivationally, and behaviourally active participants in their own learning” (Zimmerman, 1990, p. 4). “Self-regulated learning involves the self-generated thoughts, feelings, and behaviors that are systematically oriented toward the attainment of personal goals.” (Zimmerman, 2002) According to Pintrich (2000) “Self-regulated learning is an active, constructive process whereby learners set goals for their learning and then attempt to monitor, regulate, and control their cognition, motivation, and behavior in the process of learning”.

In recent decades, the concept of self-regulated learning has emerged as a foundational construct in educational psychology, emphasizing the active role of learners in managing their own learning processes. Self-regulated learning encompasses a range of meta-cognitive, motivational, and behavioral strategies that students employ to achieve academic goals (Zimmerman, 2002). These include setting goals, planning, monitoring progress, managing time and resources, seeking help when needed, and reflecting on outcomes. As higher education increasingly emphasizes autonomous and flexibility, undergraduate students must develop robust self-regulation skills to navigate academic demands, prioritize tasks and achieve their goals effectively. Self-regulated learning is crucial in higher education because it enable the students to take ownership of their learning, improve academic success, more self-directed learners, and prepare themselves for lifelong learning and professional growth.

## Parental Involvement

Parent involvement is the dedication of parents to their children's education, including the attention, thoughts, feelings, attitudes, and role modeling of parents. Parental involvement in education refers to the parenting behaviors directed towards children's education and learning experiences. A parent's role in their student's learning is not limited to school, but it also includes indirect behaviors such as discussing learning issues while conveying educational expectations (Ratelle & Duchesne, 2017). Encouraging and supportive parenting behaviors and actions help to develop self-regulated learning in students. (Liew et al., 2014). Epstein (1995) defined parental involvement is the participation of parents in their children's education, including activities at home, in school, and in the community.”

## REVIEW OF RELATED LITERATURE

Self-regulated learning, like other cognitive abilities, first emerges at home. Liew et al. (2014) argued that students' self-regulation can be promoted through parental support and their encouraging behavior. Kashahu et al. (2014) reported that family environment supports the learning capacity of students. Tiniakou et al. (2018) found that parental involvement and positive attitudes towards learning and autonomy support were found to be recurring common experiences of these highly self-regulated learners. Thomas et al. (2019a), students' perception of parental involvement was found to have a significant effect on all the dimensions of self-regulated learning, and parental involvement appeared to have the strongest effect on students' self-regulation. Azad,M and Semiyari,S.R. (2020) studied the effects of parents' education and academic involvement on ESP learners' self-regulation and language achievement: A structural equation modelling analysis. The results indicate that parents' academic involvement mediated the relationship between parents' education levels and learners' self-regulation. Consequently, parents' involvement can be regarded as a contributor to the development of their children's self-regulation. Saada, Nabil (2021) examine the Parental Involvement and Self-regulated Learning: The Case of Arab Learners in Israel and found that emotional/motivational support and parenting behaviors related to schooling are strong predictors of self-regulated learning. Geduld, Bernadette (2024) conducted a study on parental involvement in homework to foster self-regulated learning

skills: a qualitative study with parents from selected higher quintile schools and reveal that the participants' authoritative, autonomy-supportive parenting styles, alongside their educational backgrounds and socioeconomic standing, enable them to instil a range of self-regulated learning skills in their children. From the above studies, it may be seen that no attempt has been made in the state of Himachal Pradesh to study the self-regulated learning among undergraduate students in relation to gender and parental involvement. In the light of this, the present problem was taken for investigation.

### **Objectives of The Study**

Keeping in view the statement of problem following objectives has been formulated for the present investigation

To study the self-regulated learning among undergraduate students with respect to their gender.

To study self regulated learning among undergraduate students in relation to their level of parental involvement i.e. high, moderate and low.

To study the interactional effect of gender and parental involvement on Self-regulated learning of undergraduate students.

### **Hypotheses of The Study**

Male and female undergraduate students differ significantly in their self- regulated learning.

Students having different levels of parental involvement differ significantly from each other on self-regulated learning.

Gender and Parental Involvement do not have significant interactional effects on self-regulated learning of under graduate students.

## **METHODOLOGY**

This section presents the research methodology that was adopted in this study. It includes the research design, research respondents, sampling technique and procedure, research instruments, validity and reliability of the instruments, data gathering procedure, and the statistical treatment.

### **Research Design:**

In present study follows the quantitative research design. Quantitative approach seeks correlation, relationships, and causality and focuses on gathering numerical data and generalizing it across groups of people or explaining a particular phenomenon. Descriptive survey method was adopted. In descriptive research, the researcher has been studying the phenomenon of interest as it exists naturally, no chance to manipulate the individuals, conditions, or events.

### **Research Respondents**

The population for the current research included undergraduate college students studying in different academic stream viz; arts, commerce and science. The sample consisted of 1187 undergraduate students of both genders (403 male and 784 female was taken from 18 different Govt. colleges from Mandi, Kullu and Bilaspur districts of Himachal Pradesh, India. The respondent's age group ranged from 17 to 21 years.

### **Sampling Techniques**

In the present study, multi-stage Random sampling technique was used. In first stage three districts has been selected randomly by making use of lottery method. Further in second stage Government colleges has been

taken from the sampled districts. In final stage, undergraduate students were selected from each sampled colleges by making use of random numbers table.

## Research Instruments

For the collection of requisite data in the present study, the investigator used two standardized tools namely; Self-regulated learning scale by Gupta and Mehtani (2017, a) and Parental involvement scale by Chauhan and Arora (2009) are used. Self-regulated learning scale comprises 48 items out of which 40 are positive and 8 are negative items. Each item was rated on a five point Likert scale ranging from ‘strongly agree’ to ‘strongly disagree’. The items of the scale are divided into six dimensions viz: Self-awareness, Planning and goal setting, Self-motivation, Self-control, Self-evaluation and Self-Modification. The split-half reliability of the tool was 0.88, test-retest reliability was 0.982. The possible minimum and maximum score on the scale is 48 and 240 respectively. The parental involvement scale comprises of 25 items out of which 14 items are positive and 11 items are negative. Each item was rated on a five point Likert scale ranging from ‘Always’ to ‘Never’. The reliability of the test was calculated through the split-half method and coefficient of reliability is 0.92.

## Data Gathering Procedure

The data for this study was collected from 27<sup>th</sup> August to 3rd December 2024. After taking the necessary permission from the principals of each sampled Government colleges, the investigator interacted with the subjects of the study. The purpose of the study was made clear to them and they were ensured that the information provided by them would be used for research purpose only. After this, the booklets of the self-regulated leaning and parental involvement scale were distributed to students one by one and instructions were read out to them. Then students were asked to start responding to the items of the scales. Enough time was given to students to respond to all the items of the scales. The filled-up booklets were collected and the students were thanked for the cooperation extended in the collection of the data.

## Statistical Treatment

The data were analyzed by using the Statistical Package for the Social Sciences (SPSS). The mean and standard deviation were computed to determine the level of self-regulated learning, parental involvement among the respondents. In order to study the independent and interactional effect of gender and level of parental involvement on self-regulated learning of undergraduate students, 2X3 analysis of variance (Two-way ANOVA) involving two types of gender i.e. male and female and three level of parental involvement i.e. high, moderate and low) was applied.

## RESULTS AND DISCUSSION

This section comprises the analysis, interpretation of the data and discussion of the findings of the study. In order to study the main effects of gender and parental involvement on self-regulated learning of undergraduate students along with their interactional effects, analysis of variance (2X3 factorial design involving two types of gender and three levels of parental involvement i.e. high, moderate and low) was applied on mean scores of self-regulated learning.

The mean scores at different levels of gender and parental involvement are given in table-1 and figure-1 as under:

Table 1. Mean Scores of Self-Regulated Learning of Undergraduate Students at Different Levels of Parental Involvement

Sr. No.	Gender		Levels of Parental Involvement			
			High	Moderate	Low	Total
1.		Mean	178.93	173.57	162.12	171.07

	<b>Male</b>	S.D.	21.01	20.11	23.96	21.98
		N	<b>43</b>	<b>252</b>	<b>108</b>	<b>403</b>
2.	<b>Female</b>	Mean	181.90	175.85	163.51	175.52
		S.D.	16.80	16.36	18.49	17.57
		N	<b>171</b>	<b>507</b>	<b>106</b>	<b>784</b>
3.	<b>Total</b>	Mean	181.30	175.09	162.81	174.00
		S.D.	17.71	17.71	21.38	19.29
		N	<b>214</b>	<b>759</b>	<b>214</b>	<b>1187</b>

Table-1 indicates the mean scores of male (171.07) and female (175.52) undergraduate students on self-regulated learning. Further table depicts the mean scores of high parental involvements (181.30), Moderate (175.09) and low parental involvement (162.81) undergraduate students with respect to their self-regulated learning.

The pictorial representation of mean Self-regulated Learning scores of male and female undergraduate students at different levels of parental involvement is given below in Figure-1. as under:

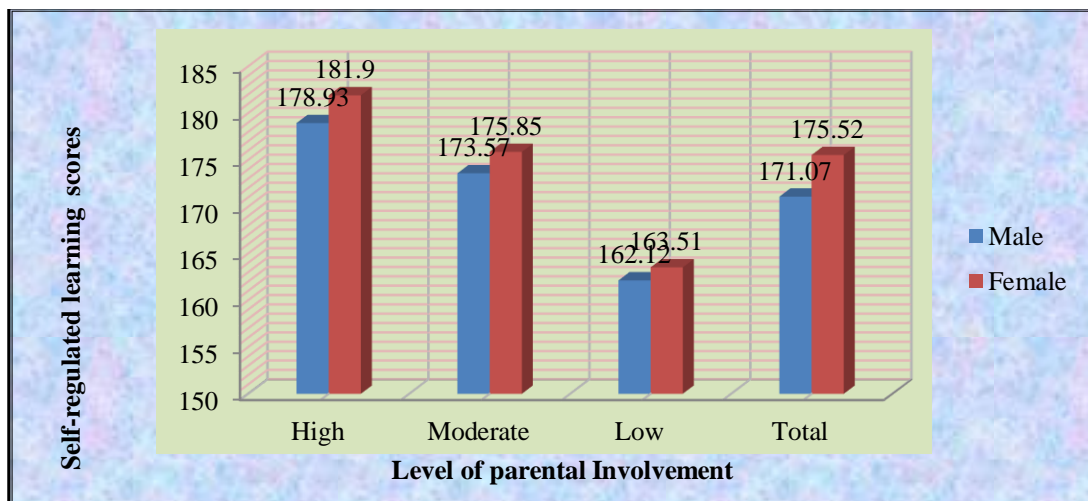


Figure-1. Bar Diagram Showing the Mean Scores of Male and Female Undergraduate Students at different Levels of Parental Involvement with regard to Self-Regulated Learning

The complete summary of the 2X3 analysis of variance is given in Table-2 as following:

Table- 2. The complete summary of the 2X3 Analysis of Variance for Self-regulated Learning scores of Undergraduate Students

Sr. No.	Source of Variation	Sum of squares	df	Mean Squares of Variance	'F'-value
1.	Gender (A)	1629.285	1	1629.285	4.595**
2	Parental involvement (B)	30928.292	2	15464.146	43.614**



3	Interaction (AXB)	231.766	2	115.883	0.327NS
4	Error Variance	418745.305	1181	354.568	
5	Total Sum	462084.639	1186		

\*\*Indicates significant at 0.01 level of significance

NS indicates Not significant

Table value for df 1/1181=3.84 and 2/1181= 2.99 at 0.05 level of significance

Table value for df 1/1181=6.64 and 2/1181= 4.60 at 0.01 level of significance

### Self-Regulated Learning of Undergraduate Students in Relation to Their Gender

From the Table-2 it was observed that 'F' Ratio for independent effect of Gender on self-regulated learning of undergraduate students irrespective of parental involvement for df 1/1181 came out to be 4.595 which is higher than the table value (3.84) at 0.01 level of significance. Hence, the Hypothesis-1 that, "Male and female undergraduate students differ significantly in their self-regulated learning." was accepted. It may be inferred that there is a significant differences in self-regulated learning of male and female undergraduate students. Further table-1 indicates that Mean scores of female undergraduate students (175.52) is significantly higher than the male undergraduate students (171.01) on self-regulated learning. Thus, from the analysis it may be concluded that female undergraduate students possesses high self-regulated learning than male counterparts. The findings of the present study was supported by Sari et al.(2017) they also reported that female students had significantly higher self-regulated learning than male students.

### Self-Regulated Learning of Undergraduate Students in Relation to Their Level of Parental Involvement

Table-2 indicates that the 'F' value for independent effect of parental involvement on self-regulated learning of undergraduate students irrespective of gender for df2/1181 came out to be 43.614 which is significantly higher than the table value (6.64) at 0.01 level of significance. Hence, the Hypothesis-2 that, "Students having different levels of parental involvement differ significantly from each other on self-regulated learning. was accepted. Therefore it may be inferred that parental involvement has significant effect on Self-regulated learning of undergraduate students. Further, from the mean scores it can be interpreted that the students with high parental involvement has exhibited significantly higher level of self-regulated learning (mean =181.30) followed by moderate (mean =175.09) and low level of parental involvement (mean=162.13). The findings of the present study supported by Faroq and Asim (2020), Martinez and Torres( 2020), Bala (2022), who also found that students having high parental involvement have better self-regulated learning as compare to the students having moderate and low parental involvement.

### Interactional Effect of Gender and Parental Involvement On Self-Regulated Learning of Undergraduate Students

It is evident from the Table-2 that calculated 'F' value for interactional effect of gender and parental involvement on self-regulated learning of undergraduate students for df 2/1187 came out to be 0.327 which is less than table value (2.99) even at 0.05 level of significance. Hence, hypothesis no.3 that, "Gender and Parental Involvement do not have significant interactional effects on self-regulated learning of undergraduate students." was accepted. So, it may be inferred that gender and parental involvement (in combination with each other) did not influence self-regulated learning of undergraduate students in significant manner. It is evident from the figure-2 as given below that there are approximately the same differences in the mean self-regulated learning scores of male and female undergraduate students regardless of their level of parental involvement i.e. high, moderate and low. This findings commensurate with the findings of Kavita (2019) who reported the non significant interaction between gender and parental involvement on self-regulated learning of secondary

students. The non-significant interactional effect of gender and parental involvement on self-regulated learning is given in figure -2

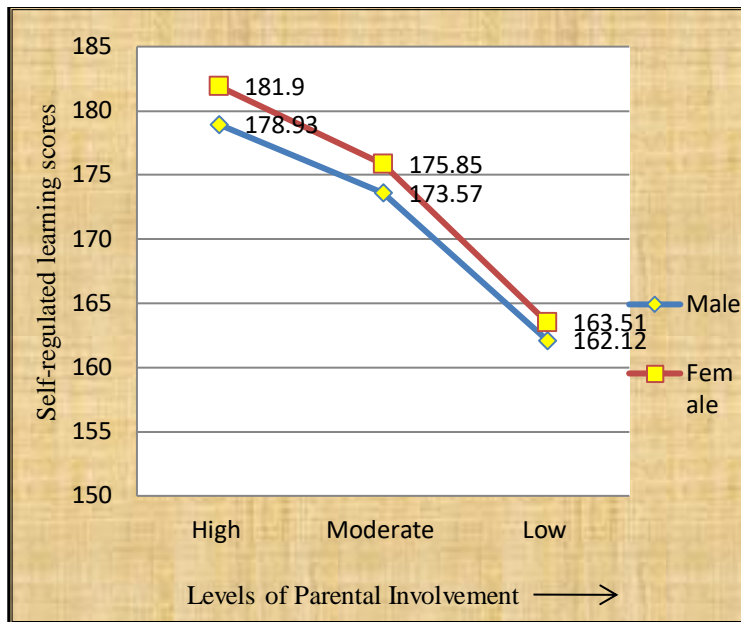


Figure-2. Non-Significant Interactional Effect of Gender and Parental Involvement of Self-Regulated Learning of Undergraduate Students.

Figure-2 shows that the mean scores of male and female undergraduate students with high parental involvement i.e. 181.90 and 178.93, followed by moderate 175.85 and 173.57 and low parental involvement 163.51 and 162.12 respectively. These differences are approximately same. From the above analysis it may be said that gender and parental involvement (in combination with each other) did not influence self-regulated learning of undergraduate students in significant manner.

## RECOMMENDATION

The current study explores the main and interactional effects of gender and parental involvement on self-regulated learning of undergraduate students. On the basis of the findings of the present study it may be recommended that Educational institutions as well as academicians need to develop a platform where students can collaborate with the parents in order to prepare them for better self-regulated learning. Parents should be encouraged their ward to set realistic goal and help to develop a plan to achieve them. Parents may be provided conducive learning environment that must be free from stress, fear and anxiety so that their ward can learn at their own way. Furthermore, parents have to be strengthening academic support that is both relevant and meaningful in fostering self-regulated learning competencies among their ward. College teachers may be act as role model and demonstrate self regulated learning behaviours and teach self-regulation strategies for goal setting, time management and self-monitoring during teaching practices for the development of better self-regulated learning among undergraduate students.

## CONCLUSION

Self-regulated learning and parental involvement are two important variables for the student's academic success. It was observed that self-regulated learning is not uniform trait but varies from person to person and social factors such as family climate and parental involvement. The findings underscore the crucial role of parental involvement in promoting self-regulated learning among undergraduate students. Institutions of higher education may be integrated self-regulated training into academic programs and develop family-oriented educational initiatives to enhance student's motivation, autonomy and achievement. To promote self-regulated learning among undergraduate students it is essential to cultivate independent, reflective and competent learners. By understanding the influence of gender and parental involvement, educators and policymakers may

be implement more personalized and effective interventions that contribute to students overall academic and personal success.

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