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# Emotional Regulation And Physical Health: Pillars Of Academic Excellence

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## ARTICLE DETAILS

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## ABSTRACT

The purpose of this study was to find out the main and interactional effects of Emotional regulation and physical health, gender and type of school on academic performance of higher secondary school students in Durg district in Chhattisgarh. A sample of 1400 students for the study was taken through stratified disproportionate random sampling technique. Scale developed by Dr. Mihir Kumar Mallik and Simranjit Kaur (2015) used to collect the data for Emotional regulation and physical health and for academic performance score, percentage marks obtained by the students in the class 10th board examination has been used. Statistical technique Mean, SD. And F-test has been applied to analyze the data and findings revealed that students with high Emotional regulation and physical health are excellent in their academics. Academic performance tends to show that boys outperform their female counterparts and students attending Government schools demonstrate higher achievement levels compared to their peers in private schools.



## INTRODUCTION-

Education encompasses both the process of gaining or sharing knowledge as well as the act of learning or teaching. It also entails getting kids ready for adulthood. Education, in contrast to many other informal and non-formal forms of socialization, focuses on teaching and learning in classrooms or settings that are similar to classrooms. Higher secondary school students' academic journeys are woven not only by the demanding nature of their coursework but also by a multitude of factors that take place outside of the classroom, creating an intricate tapestry of adolescent development. Emotional control and physical well-being stand out as critical factors among these determining factors, along with the complex interactions between gender dynamics and the kind of school. Exploring the fields of adolescent psychology and educational sociology, it is to find that the combination of physical health, gender-related experiences, emotional health, and the learning environment has a significant effect on upper secondary school students' academic achievement. Emotional regulation, the ability to manage and modulate one's emotions effectively, has gained recognition as a critical determinant of cognitive functioning and academic success. Adolescents, grappling with the turbulence of hormonal changes and societal expectations, find themselves navigating a delicate balance between emotional expression and academic demands. The manner in which students regulate their emotions not only influences their cognitive processes but also shapes their overall well-being, thereby playing a crucial role in determining academic outcomes. Simultaneously, the link between physical health and academic performance is a burgeoning field of research. The holistic well-being of students, encompassing factors such as nutrition, exercise, and sleep patterns, has been identified as instrumental in cognitive function and information retention. Understanding the complex relationship between physical health and academic skills sheds light on the necessity of cultivating a healthy lifestyle to optimize educational outcomes. Gender, as a social construct, introduces a layer of complexity to the academic landscape. Earlier research indicated that gender-related experiences, societal expectations, and stereotypical perceptions can influence educational aspirations and achievements. The exploration of gender dynamics in the context of higher secondary education provides valuable insights into the challenges and opportunities that different genders may encounter, contributing to a thin understanding of academic performance. Furthermore, the type of school environment, whether public or private, adds



another dimension to the academic equation. Variations in resources, teaching methodologies, and peer dynamics can impact student experiences and outcomes. Investigating how the type of school interacts with emotional regulation, physical health, and gender dynamics offers a comprehensive perspective on the multifaceted nature of academic success in higher secondary education. In this exploration, we embark on a journey to unravel the intricate connections between emotional regulation, physical health, gender dynamics, and school type, seeking to understand how these factors collectively shape the academic performance of higher secondary school students. As to navigate through this area, the aim is to not only identify correlations but also unearth valuable insights that can inform educational policies and practices, fostering an environment conducive to the holistic development of our future leaders and thinkers.

## REVIEW OF LITERATURE

Hafiz (2015) discovered that there was no significant correlation between Cognitive reappraisal and CGPA, but there was a significant relationship between Expressive Suppression and CGPA. The results of the regression model showed that students' academic performance was not predicted by expressive suppression or cognitive reappraisal. Shahidi et al. (2017) investigated whether MBSR's (mindfulness-based stress reduction) effects persisted for both of these variables during the follow-up. It may be suggested, based on the study's findings, that school counselors employ mindfulness to help their students feel less anxious. Supervía & Robres (2021) found that the significance of encouraging adaptive behaviors in the classroom that can result in students' adequate personal development in addition to their optimal academic performance is noted, as is the influence of the academic self-efficacy variable as a mediator between the studied constructs. Nadeem et al. (2023) revealed a significant positive association between cognitive reappraisal and academic performance while, a significant negative association between expressive suppression and academic performance in students. Moreover, both the emotion regulation strategies i.e., cognitive reappraisal and expressive suppression were found to be significant predictors of academic performance in students.



## **OBJECTIVE –**

To study the effect of Emotional regulation and physical health, gender and type of school on academic performance of higher secondary school students.

## **HYPOTHESIS –**

**H<sub>0</sub>** -There will be no significant difference of Emotional regulation and physical health, gender and type of school on academic performance of higher secondary school students.

## **RESEARCH METHODOLOGY**

### **RESEARCH METHOD**

Descriptive survey method has been adopted to accomplish this research work.

### **RESEARCH DESIGN**

- **Independent Variable-** Emotional regulation and physical health.
- **Demographic Variables-** Gender, Type of School.
- **Dependent Variable-** Academic Performance.

### **TOOL-**

- The scale developed by Dr. Mihir Kumar Mallik and SimranjitKaur (2015) used to collect the data for Emotional regulation and physical health. This scale has 14 questions with negative and positive both type of questions it has.
- For academic performance score, percentage marks obtained by the students in the class 10th board examination has been used.

## **SAMPLE –**

The present study has been conducted on higher secondary school students of Durg district in Chhattisgarh. 1400 students have been drawn with stratified disproportionate random sampling method. Because the sample is divided into categories, high, medium and low, so the analysis of data has been done on 800 samples only between high and low group.

**H<sub>0</sub> There will be no significant effect of Emotional regulation and physical health, gender and type of school on academic performance of higher secondary school students.**

**Table 1**

**Summary of ANOVA for 2× 2× 2factorial experiment of academic performance of higher secondary school students**

Source of Variance	Type III Sum of Squares	Df	Mean sum of squares	F-ratio
Emotional regulation and physical health	1839.211	1	1839.211	12.625**
Gender	1060.301	1	1060.301	7.279**
Type of school	743.051	1	743.051	5.101*
Emotional regulation and physical health * Gender	4.651	1	4.651	0.032 <sup>NS</sup>
Emotional regulation and physical health *Type of school	215.281	1	215.281	1.478 <sup>NS</sup>
Gender*Type of school	0.151	1	0.151	0.001 <sup>NS</sup>
Emotional regulation and physical health *Gender * Type of school	33.211	1	33.211	0.228 <sup>NS</sup>
Error	115374.990	792	145.675	
Total	3708997.000	800		
Corrected Total	119270.849	799		

\*Significant at 0.01 level, \*\*Significant at 0.05 level, NS= Not Significant, N = 800

\* Main Effect of **Emotional Regulation and Physical Health** on academic performance of higher secondary school students

In table 1 the main effect of **Emotional regulation and physical health** was found to be significant  $[(1/792) = 12.625, p < .01]$ . It is indicated that there is an individual effect of **Emotional regulation and physical health** on academic performance of higher secondary

school students. Therefore the null hypothesis stated as “There exists no significant effect of **Emotional regulation and physical health** on academic performance of higher secondary school students” has been **rejected** i.e. **Emotional regulation and physical health** produced main effect on academic performance of higher secondary school students.

Table 2

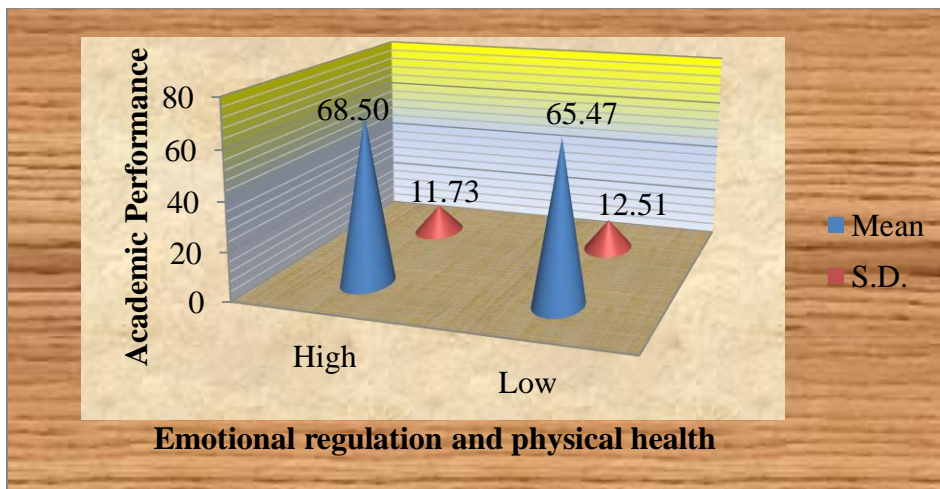
Showing the main effect of **Emotional regulation and physical health** on academic performance of higher secondary school students

<b>Emotional regulation and physical health</b>	High	M = 68.50 SD = 11.73
	Low	M = 65.47 SD = 12.51

It was observed from table 2 that academic performance of higher secondary school students with high Emotional regulation and physical health (M=68.50) differ significantly from academic performance of higher secondary school students with low Emotional regulation and physical health (M=65.47). Therefore academic performance of higher secondary school students with Emotional regulation and physical health is higher than academic performance of higher secondary school students with low Emotional regulation and physical health. Reason for this difference might be students with balanced emotions and with good health may focused very well in their academics, as a result they achieve better position in academics. **Mohzan et al. (2013)** **Trigueros (2019)** **Usan et al. (2021)** and **Thomas & Kenneth (2009)** found same result.

In order to know the influence of Emotional regulation and physical health on academic performance of higher secondary school students graph 1 has been plotted.

Graph 1: Influence of main effect of Emotional regulation and physical health on academic performance of higher secondary school students.



#### \* Main Effect of Gender on academic performance of higher secondary school students

Main effect of gender was found to be significant [ $(1/792) = 7.279, p < .01$ ]. There was an individual effect of gender on academic performance of higher secondary school students. Therefore the null hypothesis stated as “There exists no significant effect of **gender** on academic performance of higher secondary school students” has been **rejected** i.e. **gender** produced main effect on academic performance of higher secondary school students.

Table 3

Showing the main effect of Gender on academic performance of higher secondary school students

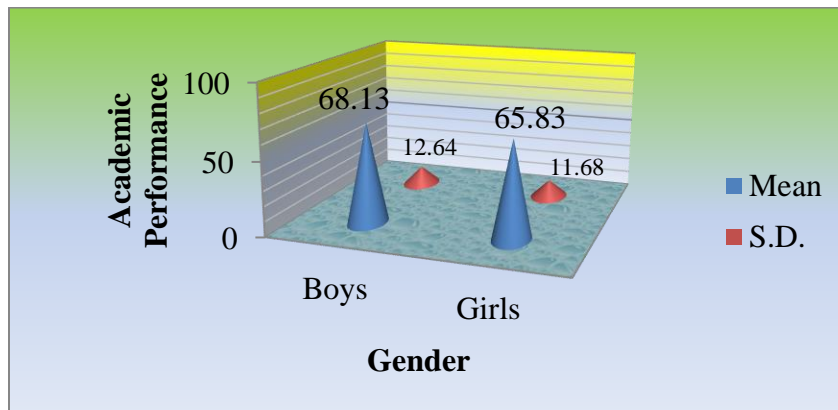
Gender	Boys	M = 68.13 SD = 12.64
	Girls	M = 65.83 SD = 11.68

It was observed from table 3 that academic performance of boys (M=68.13) differs significantly from academic performance of girls (M=65.83). Therefore academic performance of boys' students' higher secondary school is significantly higher than academic performance of girls'

students' higher secondary school. Reason behind this difference may be boys are more dedicated to their academics, curriculum related task as well. Whereas girls are more actively participated in co-curricular activities. Compared to girls, boys are more committed to and focused on their studies. While girls are more interested in extracurricular activities in school. Joseph *et al.* (2015) and Dubucet *et al.* (2020) found similar result.

In order to know the influence of gender on academic performance of higher secondary school students graph 2 has been plotted.

Graph 2: Influence of main effect of gender on academic performance of higher secondary school students.



\* Main Effect of Type of School on academic performance of higher secondary school students

Main effect of Type of School was found to be significant [ $(1/792) = 5.101$ ,  $p < .05$ ]. There was an individual effect of Type of School on academic performance of higher secondary school students. Therefore the null hypothesis stated as "There exists no significant effect of Type of School on academic performance of higher secondary school students" has been **rejected** i.e. Type of School produced main effect on academic performance of higher secondary school students.

Table 4

Showing the main effect of Type of School on academic performance of higher secondary school students

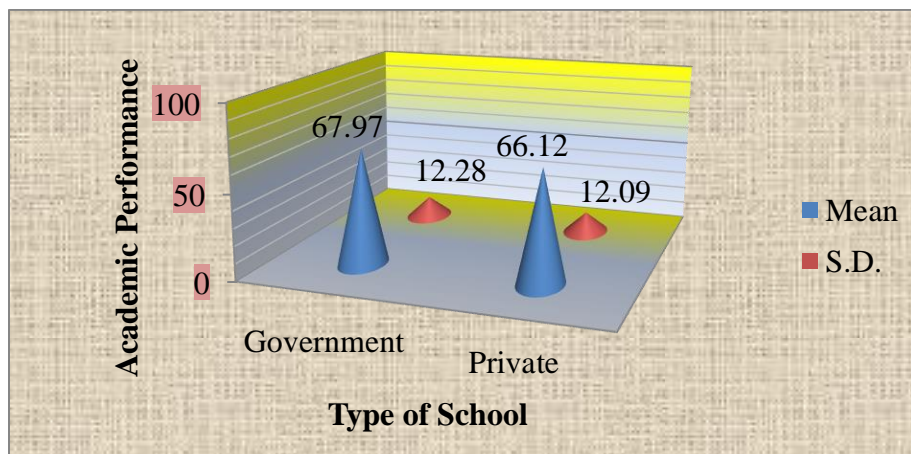


Type of School	Government	M = 67.97 SD =12.28
	Private	M = 66.12 SD =12.09

It was observed from table 4 that academic performance of students of Government schools (M=67.97) is significantly differ from students of Private schools (M = 66.12). Therefore academic performance of students of Government schools is significantly higher than academic performance of students of Private schools. In government schools a lot of facility provided to the students. Self-perceptions, task values, learning objectives, and accomplishment motivations, in addition to IQ and prior achievement, influence their grades in many academic disciplines are the major reasons behind the difference of means of both group. **Yusuf & Adigun (2010)** also found the same.

Influence of Type of School on academic performance of higher secondary school students graph 3 has been plotted.

Graph 3: Influence of main effect of Type of School on academic performance of higher secondary school students.



\* **Interactional effect of Emotional regulation and physical health and Gender on academic performance of higher secondary school students**

From the table 1 it can be seen that F- value of **0.032 (df=1/792)** for interactional effect of Emotional regulation and physical health and gender was not found to be significant. It indicates that the mean scores of academic performance of higher secondary school students in context of Emotional regulation and physical health and gender did not differ significantly. Therefore the hypothesis is “There exists no significant effect Emotional regulation and physical health and gender on academic performance of higher secondary school students” is accepted.

\* **Interactional effect of Emotional regulation and physical health and Type of school** on academic performance of higher secondary school students

From the table 1 it can be seen that F- value of **1.478 (df=1/792)** for interactional effect of Emotional regulation and physical health and Type of school was not found to be significant. It indicates that the mean scores of academic performance of higher secondary school students in context of Emotional regulation and physical health and Type of school did not differ significantly. Therefore the hypothesis is “There exists no significant effect of Emotional regulation and physical health and Type of school on academic performance of higher secondary school students” is accepted.

\* **Interactional Effect of Gender and Type of School** on academic performance of higher secondary school students

From the table 1 it can be seen that F- value of **0.001 (df=1/792)** for interactional effect of gender and type of school was not found to be significant. It indicates that the mean scores of academic performance of higher secondary school students in context of gender and type of school did not differ significantly. Therefore the hypothesis is “There exists no significant effect of gender and type of school on academic performance of higher secondary school students” is accepted.

\* **Interactional Effect of Emotional regulation and physical health, Gender and Type of School** on academic performance of higher secondary school students

From the table 1 it can be seen that F- value of **0.228 (df=1/792)** for interactional effect of Emotional regulation and physical health, gender and type of school was not found to be significant. It indicates that the mean scores of academic performance of higher secondary school students in context of Emotional regulation and physical health, gender and type of school did not differ significantly. Therefore the hypothesis is “There exists no significant effect of Emotional regulation and physical health, gender and type of school on academic performance of higher



secondary school students” is accepted.

### FINDINGS OF THE STUDY

Students in higher secondary schools' physical and emotional health had an impact on their academic performance. The gender of students also affected their academic performance, and for upper secondary school students, the type of school mattered. There hasn't been any evidence of an interaction between gender, the type of school, emotional regulation and physical health, or gender and physical health. Furthermore, no relationships between gender, type of school, and emotional regulation and physical health have been discovered.

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