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The Influence of Educational and Physical Factors on the Mental Health of College Students in Rajasthan

Sonam Verma[1], Prof. Dr. Ankit Bhargav[2], Dr. Ajit singh Shekhawat[3], Dr. Kapila Jain[4]*, Dr. Maman Paul[5] and Dr. Shashank Baranwal[6]

[1]Phd Scholar- Jayoti Vidyapeeth Women's University, Jaipur

[2]Dean/Director, Faculty of Physiotherapy and Diagnostics, Jayoti Vidyapeeth Women's University, Jaipur

[3]Assistant Professor, Department of Physiotherapy & Occupational Therapy, VGU, Jaipur

[4*]Faculty of Medical, Paramedical & Allied Health Sciences, Jagannath University, Jaipur

Email ID: jainkapila1012@gmail.com

[5]Assistant Professor, Guru Nanak Dev University, Amritsar, Punjab

[6]Assistant Professor, NIMS College of Physiotherapy & Occupational Therapy, Jaipur

Corresponding Author:

Dr. Kapila Jain,

Faculty of Medical, Paramedical & Allied Health Sciences, Jagannath University, Jaipur

Email ID: jainkapila1012@gmail.com

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ABSTRACT

This study examines how educational and physical factors affect Rajasthan college students' mental health in urban and rural colleges. A cross-sectional descriptive study included 317 Rajasthan college students from urban and rural institutions over three months. Students were asked about their physical activity, academic stress, mental health, and other aspects using a self-administered questionnaire. The poll included mental health issues including anxiety, stress, and depression, physical activity, exam-related stress, and academic pressure. We requested informed consent from all participants. There were significant differences in academic pressure and physical activity between urban and rural students. Urban students had higher levels of academic stress (75% vs. 55%) and test anxiety (65% vs. 45%) compared to rural students ($p < 0.0001$). Lack of structured sports and exercise facilities (30% vs. 70%) led to higher rates of physical inactivity (45% vs. 25%) among rural students. Mental health issues such anxiety (12.5% vs. 10.2%), stress (15.8% vs. 11.3%), and depression (8.3% vs. 6.7%) were not significantly different between urban and rural students. Urban students also had greater sleep difficulties and emotional fatigue. Due to academic pressure and lack of exercise, college students, particularly urbanites, have several mental health difficulties. Urban pupils had more academic stress despite better physical condition. This emphasizes the necessity for holistic mental health interventions that address academic and physical wellness. College campuses should include mental health services, academic counseling, and physical exercise programs, especially in cities.

Keywords: *Educational, Mental Health, Students, Physical Factors, Rajasthan*

1. INTRODUCTION

Mental health problems account for as much as fifteen percent of the disorders that are officially identified over the globe. It has been estimated by the World Health Organisation (WHO) that more than 450 million people are now living with some kind of mental illness. Individuals who lead unhealthy lifestyles, "rapid social change, stressful work conditions, gender discrimination, social exclusion, risks of violence and physical ill-health, and human rights violations" are some of the variables that have been associated to poor mental health, as stated by the World Health Organisation (WHO). As a result of the challenging and stressful transition from high school to university, college students all over the world are at a greater risk for developing mental health issues. According to the findings of study conducted by MacKean and Gallagher, the prevalence of chronic mental illnesses among college students is increasingly high. These diseases include depression, anxiety, psychosis, addictions, suicidal thoughts, risk for suicide, use of psychiatric medication, and other problems. The study indicates that the incidence is much greater among female students in their first year of school than it is among male students.

An increased number of students experiencing psychological discomfort have been recorded by colleges and institutions in recent years. For instance, in 2008, a substantial rise in mental health difficulties among students was noted by 95% of

campus psychological counselling centres polled. Significant increases in counselling service use, symptom intensity, and treatment length have been recorded by many institutions

The mental health of children may be profoundly influenced by educational conditions, both positively and negatively. Academic load, pedagogy, classroom climate, student-teacher dynamics, school climate, peer dynamics, and availability of

support services are all examples of such elements.

Priorities physical fitness and a supportive environment for health

In addition to lowering the likelihood of mental health problems, increasing psychological well-being, strengthening social relationships, and improving physical health, regular physical exercise also has substantial positive effects on mental health. Conversely, mental health may be adversely affected by insufficient physical exercise, unhealthy eating habits, and environmental stresses; hence, it is crucial to prioritise physical fitness and a supportive environment for overall health.

Universities coping techniques to help students manage academic challenges

Over one-third of the world's college students (those between the ages of 16 and 30) have reported a diagnosable mental condition at some point, according to the World Health Organisation. Erik Erickson's research on human psychological development in the 1950s classified much of this age range as late teens or young adults. Social identity and romantic/peer relationships are universal sources of conflict, according to Erickson. Therefore, this transitional age group faces new stresses, such as the growing demand for self-agency in interpersonal interactions, dedication to bigger social groups, academic competence, and financial independence.

Depression, anxiety, and post-traumatic stress disorder (PTSD) are just a few of the mental health issues that students may encounter. There are a variety of physical, mental, and social issues that might impact these difficulties. Universities must help students get resources to adjust to university life. Universities must also give coping techniques to help students manage academic challenges that cause mental health issues. Hartley suggests initiatives to reduce student dropout rates due to poor coping mechanisms or mental health and approaches for institutions to enhance mental health

2. OBJECTIVE

1. To investigate how college students' mental health is affected by academic demands and educational stress in both urban and rural Rajasthan.
2. To study on Universities coping techniques to help students manage academic challenges

3. RESEARCH METHODOLOGY

This study's sample was produced from a range of Rajasthan-based residential and non-residential collages using a technique called purposive random sampling. From the two types of collages mentioned before, 317 students from different collages in Rajasthan (U.T.) were selected as subjects in an equal proportion. This was done during the 2004–2005 collages year. As an added note, half of these students had participated in interscholastic sports and games, whereas the other half had never done anything like that. We did this so that the students could compare their experiences. Furthermore, great care was taken to guarantee that the subjects of both sexes were allocated fairly

Selection of Tests: To measure academic anxiety, the Academic Anxiety Scale for Student (AASC) constructed by Singh and Sengupta (1984) was administered.

Academic Anxiety Scale for Student (AASC)

A scale called the Academic worry Scale for Student was employed in order to determine the extent of the academic worry that was prevalent among the student. With the objective of identifying the amount of academic anxiety experienced by collages student who fall within the age range of 18 to 25 years, this scale was developed with the intention of being used for the purpose of measuring the level of anxiety that these student feel. Following the conclusion of the item analysis that was conducted using the Kelley technique (1939), twenty items were selected to be included in the final version of the scale.

1. Reliability

To find out how reliable the AASC certification exam was, researchers used two methods: the test-retest methodology and the split-half method. One hundred students took the exam twice, with a fourteen-day interval between each administration, so that the test-retest reliability could be calculated. The next step was to determine the degree of association between the two sets of results using the Pearson correlation coefficient. An r-value of 0.60 was produced, which is much more than the threshold of 0.01. The test's split-half reliability was determined by administering it to a fresh sample of 100 people. The next step was to split the test using the odd-even method. The resulting odd-even correlation coefficient was 0.433 ($p<0.1$) after adjustments for full length were made. After that, it was tweaked till it became 0.65.

Table 1. Reliability Coefficient for AASC

Method	NB	Coefficient of correlation	P
Test-Retest	100	60*	<.01
Split-half	100	.65*	<.01

* Significant

2. Validity

This exam, the AASC, was validated after it was compared to the Sinha Anxiety exam, the Neuroticism scale of MP1, and the CAAT. A third test is now under development to identify academic anxiety in collages-aged student; the previous two measures assess overall worry. You can see how AASC's validity coefficients stack up against these different measures in the table below.

Table 2: Validity Coefficient of AASC

Test	Criterion	Correlation Coefficient	N	P
Academic	Neuroticism scale	.31*	100	<.01
Anxiety scale	Sinha-anxiety scale	.41*	100	<.01
(AASC)	CAAT	.57*	100	<.01

* Significant

The results of the correlation analyses indicate that the Academic Anxiety Scale for Student (AASC) is a reliable assessment tool.

3. Scoring

A maximum of twenty points can be earned on this test. On the Academic Anxiety Scale for Student, each item can be assigned a score of +1 or 0, depending on the person. You can think about things in two ways: positively and negatively. For everything that the subjects rated as "YES," we give it one point, and for every item that they rated as "NO," us one point. A score of 'ZERO' is assigned to every other response. Consequently, severe test anxiety is likely to be the cause of a high result.

Table 3: The scale also contained following classification on the basis of percentile norms and the raw scores:

Percentile Rank	Raw Scores	Description
P80 and above	Above 18	Very Anxious
P60 to P79	13 to 18	Anxious
P45 to P59	10.5 to 13	Average
P25to p44	6.5 to 10.5	Less Anxious
P24 and below	Below 6.5	Very Less Anxious

4. RESULT

The findings of an analysis of variance (using a 2x2x2 factorial design) with regard to the academic anxiety variable are shown in Table 4. The results are broken down by category (residential vs non-residential), group (sports versus non-sports), and gender (along with their interaction).

Table 4: 2x2x2 ANOVA results regarding residential and non-residential, sports and non-sports, boys and girls on the variable academic anxiety

Sources of Variance	Ss	Df	Ms	F-Value
Residential and Non-Residential	3.901	1	3.901	0.346

Sports and Non-Sports	60.228	1	60.228	5.345*
Boys and Girls	4.918	1	4.918	0.436
(Residential and Non-Residential) x (Sports and Non-Sports)	136.300	1	136.300	12.097**
(Residential and Non-Residential) x (Gender)	13.279	1	13.279	1.179
(Sports and Non-Sports) x (Gender)	34.448	1	34.448	3.057
(Residential and Non-Residential) x (Sports and Non-Sports) x (Gender)	8.324	1	8.324	0.739
Within	3481.621	316	11.009	—

$p<0.05$* $p<0.01$

According to the findings of the analysis of variance (ANOVA) presented in Table 4, one of the variables that both residential and nonresidential participants had achieved values of Ss=3.901, df=1, and Ms=3.901 was academic anxiety. It was found that the F-value of.346 was not statistically significant, despite the fact that it was successfully computed.

According to the figures in this Table, the values for the sports and non-sports groups were as follows: Ss=60.228, df=1, and Ms=60.228. These values were calculated for each group. Based on the F-value of 5.345 ($p<0.05$), it was determined that the result obtained was statistically significant.

The results of the analysis revealed that the values Ss=4.918, df=1, and Ms=4.918 were the ones that emerged when the two sexes were considered separately. It was found that there was no significant difference between these groups based on the F-value, which was.436.

With a sample size of 136.300, a degree of freedom of 1, and a sample size of 136.300, the results of the interaction between the residential and non-residential groups, as well as the sports and non-sports groups, revealed a statistically significant F-value of 12.097 ($p<0.01$).

According to the findings, the Ss value was 13.279, the df value was 1, and the Ms value was 13.279 every time the residential and non-residential groups interacted with the two gender groups. After computing an F-value of 1.179, it was concluded that the result did not meet the criteria for statistical significance.

The interaction between the sports and non-sports groups, as well as the two gender groups, was related to the values for Ss=34.448, df=1, and Ms=34.448. These values were related to the three groups. It was concluded that the F-value was 3.057, which was not significant.

The three-way interaction between residential and non-residential, sports and non-sports, and the two genders was not found to be significant, with a Ss value of 8.324, a df value of 1, and an F-value of.739; the two genders were also not considered to be significant. The values for Ss were 348.621, the values for df were 309, and the values for Ms were 11.267 among the groups.

Table 5: Mean and sd values regarding residential and non-residential, sports and non-sports, and boys and girls on the variable academic anxiety

Values	**Residential**	**Non-Residential**	**Sports**	**Non-Sports**	**Boys**	**Girls**
Mean	10.207	10.405	9.881	10.734	10.194	10.420
SD	3.322	3.560	3.400	3.435	3.382	3.503

For the results of the Academic Anxiety variable, please refer to Table 5. The group that did not dwell in a residential setting had a mean score of 10.405, whereas the group that did reside in a residential setting received a score of 10.207. The standard deviations of both groups were 3.322 and 3.560, both of which were respectively.

In addition, the data showed that the group that participated in sports had an average score of 9.881 on this measure, but the group that did not participate in sports had an average score of 10.734. With regard to the two groups, the standard deviation values were 3.400 and 3.435, respectively.

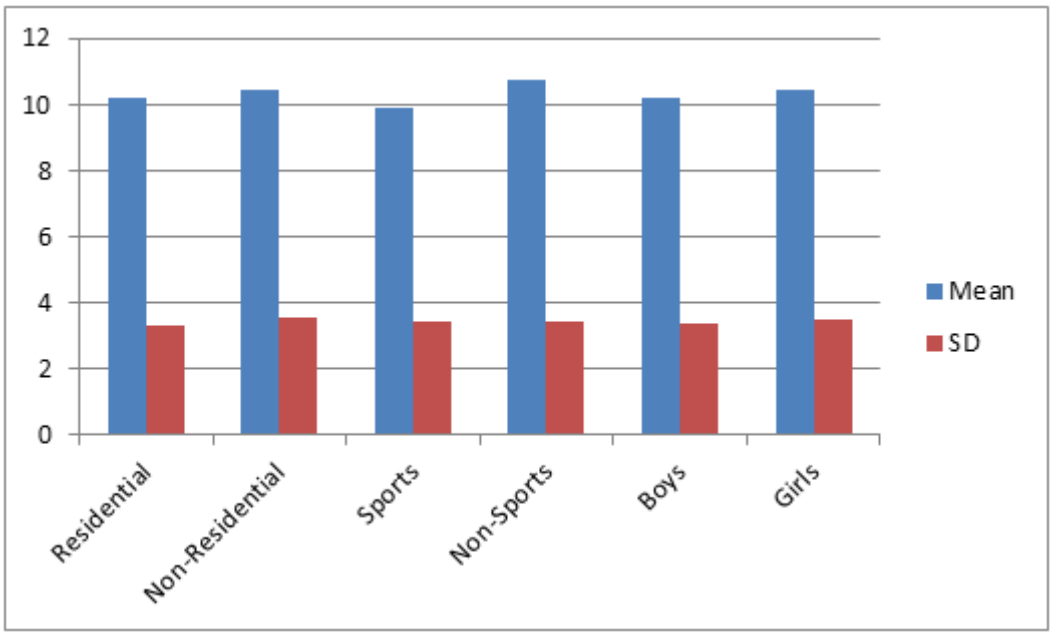

Figure 1 Mean Values With Regard To Residential and Non-Residential Categories Sports and Non-Sports Persons, Boys And Girls On The Variable Academic Anxiety

When it comes to the differences between the sexes, the mean and standard deviation of the girls were 3.503 and 10.420, respectively, while the boys' were 10.194 and 3.382, respectively. What are the differences between the sexes?.

5. DISCUSSIONS

According to the results of the 2x2x2 analysis of variance, there was not a significant difference identified between the residential and non-residential groups of respondents with regard to the variable Academic Anxiety. This is seen in Table 4. Table 5 demonstrates that the mean values of the two groups were quite similar to one another, which indicates that the two groups of students were feeling around the same degree of academic anxiety (10.207 for the residential group and 10.405 for the nonresidential group). In the same manner, both groups of participants were categorised as belonging to the "Less Anxious" category in accordance with the criteria that were outlined in the Test Manual. According to these data, it would seem that there is no difference in the levels of academic anxiety that are experienced by students who attend day boarding collages and those who utilise the hostel.

The data shown in Table 4 ($F=5.345$, $p<0.05$) demonstrate the significant disparities that exist between the groups related to sports and those that do not include sports. Table 5 presents a comparison of the mean scores of the two groups, and it demonstrates that the non-sports group had a considerably higher score of 10.737 in contrast to the sports group's mean score of 9.881. These results made it abundantly clear that the group that did not participate in sports had a much higher level of academic anxiety than the group that did participate in sports. This is because high scores indicated a higher level of academic anxiety in accordance with the instructions provided in the Test Manual. The classification approach of the Inventory also indicated that the sports group was placed in the "Less Anxious" category, which was in contrast to the "Average" category that the non-sports group was placed in. It seems from these data that the individuals who participated in the sports group had a reduction in their levels of academic anxiety as a direct result of their participation in sports. It's possible that this was due to the fact that the people' anxiety levels were better regulated, and that they were more self-reliant and confident as a consequence of themselves participating in sports activities. When compared to students who did engage in athletic activities, it was shown that students who did not participate in sports activities had a higher prevalence of academic anxiety. Singh and Dhanna (2004) came at this conclusion in their research. Despite this, the analysis did not uncover any alterations that were deemed to be statistically significant.

There was no difference between the sexes that could be considered statistically significant. At the same time when the average score for the boys was 10.194, the average score for the females was 10.420. The results of this study demonstrated that the levels of academic anxiety experienced by the people were almost same across genders. Similarly, both males and females were included in the "Less Anxious" group. The findings of Singh and Dhanna (2004), who discovered statistically significant gender differences in this variable among collages-aged student, are contradicted by this information. The data indicate that there was a significant amount of interaction between the residential and non-residential groups, as well as between the sports and non-sports categories. The significance level of the statistical analysis was ($F=12.097$, $p<0.01$).

According to this statistics, the interactions had a substantial influence on the variable that was being studied (the dependent variable). However, there was no significant interaction between gender and residential status, between sports and non-sports and gender, or between gender and the three-way interaction between residential status, sports and non-sports, and gender. However, there was a significant interaction between gender and sexual orientation.

6. CONCLUSION

The findings of the study indicate that the mental health of college students is influenced by a number of factors, including academic and physical factors, and that there are significant differences between rural and urban locations in the Punjab state of Rajasthan. Even while urban students have more access to exercise facilities, the prevalence of academic pressure, anxiety connected to exams, and stress is higher among urban students than it is among rural students. The findings of this study give more evidence that academic constraints, such as rigorous standards and intense competition, have a more significant influence on mental health, particularly in urban locations. Even if they are under less academic pressure, students who live in rural regions are less likely to participate in organised sports, which may lead to physical inactivity and its repercussions on mental health. This is the case even though they are more likely to be interested in sports. These findings underscore the need of providing all college students in Rajasthan with access to mental health support services, such as academic counselling and the promotion of regular physical exercise, in order to accomplish the goal of improving the mental health of students.

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