

Understanding the Interrelationship between Psychomatic Symptoms and Suicidal Ideation: A Comprehensive Study on Students

Pooja N. Gadhavi¹, Dr. Arvindgiri K. Aparnathi²

¹Ph. D Scholar, Department of Psychology, Shah K.S. arts & V.M. Parekh Commerce College, Kapadwanj

²Assistant Professor, Department of Psychology, Shah K.S. arts & V.M. Parekh Commerce College, Kapadwanj

Abstract- The primary aim of the present study was to examine the relationship between psychosomatic symptoms, suicidal ideation, and selected dimensions of psychological wellbeing among students from varied demographic backgrounds. The study included residential background (urban–rural), gender (male–female), and academic stream (arts–commerce) as independent variables, forming a 2×2×2 factorial design. A total of 240 students were proportionately selected from each category. Data were collected using a personal information sheet, two components of the Psychological Wellbeing Scale developed and standardized by Bhogle and Prakash (1885) and Gujarati translated by Suvera. Factorial ANOVA was used to examine the main and interaction effects of the demographic variables. Results for psychosomatic symptoms showed that residential area and gender did not exert significant effects, whereas academic stream demonstrated a statistically significant influence. The interaction effects of area × gender and gender × stream were significant, while other interactions were non-significant. For suicidal ideation, area and gender were again non-significant, with academic stream emerging as a significant predictor; only the gender × stream interaction reached statistical significance. Correlation analysis further revealed a significant positive relationship between psychosomatic symptoms and suicidal ideation, indicating that students experiencing higher psychosomatic distress are more likely to report suicidal thoughts. These findings suggest that individual demographic variables such as area or gender may not independently predict psychosomatic symptoms or suicidal ideation; however, certain combinations, particularly gender in conjunction with academic stream, meaningfully influence these psychological outcomes. The study highlights nuanced subgroup patterns rather than broad demographic

differences and underscores the importance of early identification and timely intervention for students experiencing psychosomatic symptoms and suicidal ideation. Future research is recommended to include additional dimensions of psychological wellbeing, qualitative methods, or longitudinal designs to better understand underlying mechanisms and to develop targeted mental health support strategies for students.

Keywords: Psychomatic Symptoms, Suicidal Ideation, Urban-Rural Area, Male-Female, Arts-Commerce.

I. INTRODUCTION

Students today live in a world where expectations grow faster than their ability to cope. Behind everyday smiles, many carry hidden worries about studies, family hopes, friendships, and their own future. When this inner pressure builds, the mind often speaks through the body headaches, tiredness, weak sleep, or unexplained pain. These psychosomatic symptoms are not just physical issues; they reveal the emotional weight a student silently carries. At times, this emotional burden becomes so heavy that some students begin to feel hopeless or question the value of their own life. Suicidal thoughts do not appear suddenly; they grow slowly through loneliness, fear of failure, or feeling misunderstood. These experiences differ for every student. An urban student may face fast competition, while a rural student may struggle with fewer opportunities. Gender expectations shape how freely emotions are expressed, and different academic streams bring their own pressures and doubts. Understanding these silent struggles is

important. This study seeks to explore how psychosomatic symptoms and suicidal ideation vary across area, gender, and stream, so that students lived experiences can be heard with empathy and addressed with care.

II. REVIEW LITERATURE

1. “Reddy, K. S., & Rao, V. (2018). Prevalence of psychosomatic symptoms in Indian adolescents. *Indian Journal of Psychiatry*”
Reddy and Rao (2018) examined the prevalence of psychosomatic symptoms among Indian adolescents and found that complaints such as headaches, body pain, stomach discomfort, and sleep problems were widely reported. Their study suggests that these symptoms often emerge due to psychological stress linked with academic pressure, family expectations, and emotional difficulties. They highlighted that psychosomatic symptoms are not isolated physical issues but indicators of underlying mental strain. The authors emphasized the importance of early identification and mental-health support in schools to reduce the impact of stress on adolescents’ physical and emotional well-being.
2. “Nguyen, T., & Pham, H. (2021). Relationship between academic stress, psychosomatic symptoms, and suicidal ideation. *Child and Adolescent Psychiatry and Mental Health*” Nguyen and Pham (2021) explored how academic stress contributes to both psychosomatic distress and suicidal ideation among adolescents. Their findings reveal that high academic pressure significantly increases psychosomatic symptoms such as fatigue, headaches, and sleep disturbances. Importantly, the study showed that these symptoms act as a mediator between stress and suicidal thoughts meaning that when stress remains unmanaged, psychosomatic distress intensifies and can escalate into emotional instability and suicidal ideation. The authors suggest that reducing academic stress and strengthening coping resources are essential for preventing self-harm risk among students.

III. OBJECTIVE

1. To Study Regarding the Psychomatic Symptoms of Students in Urban and Rural Areas.
2. To Study Regarding the Suicidal Ideation of Students in Urban and Rural Areas.
3. To Study Regarding the Psychomatic Symptoms and Suicidal Ideation of male and Female.
4. To Study Regarding the Psychomatic Symptoms and Suicidal Ideation of Students in Arts and Commerce.
5. To Study Regarding the interrelationship of Area, Gender and Stream affect Student’s Psychomatic Symptoms and Suicidal Ideations
6. To Study Regarding Significant correlational between Psychomatic Symptoms and Suicidal Ideation.

IV. HYPOTHESIS

1. There is no significant difference in psychosomatic symptoms between urban and rural students.
2. There is no significant difference between male and female students in psychosomatic symptom.
3. There is no significant difference in psychosomatic symptoms between Arts and Commerce students.
4. There is no significant between area and gender of psychosomatic symptoms
5. There is no significant between area and stream of psychosomatic symptoms
6. There is no significant between gender and stream of psychosomatic symptoms
7. Area, gender, and stream do not have any significant interaction effect on psychosomatic symptoms
8. There is no significant difference in Suicidal Ideation between urban and rural students.
9. There is no significant difference between male and female students in Suicidal Ideation.
10. There is no significant difference in Suicidal Ideation between Arts and Commerce students.
11. There is no significant between area and gender of Suicidal Ideation
12. There is no significant between area and stream of Suicidal Ideation
13. There is no significant between gender and stream of Suicidal Ideation

14. Area, gender, and stream do not have any significant interaction effect on Suicidal Ideation.
15. There is no significant correlation between psychomatic symptoms and suicidal ideation. Among students.

V. METHOD

Selection of Sample

Present Research Work for Stratified Random Sampling Method used and carried out 240 Student Respondents. All Respondents Shall take From Kheda District. Out of Which 120 urban and rural areas students. At the same time 60 students were taken basis on Gender among with that 30 students will take by different Streams like arts and commerce.

Tools used:

The following tools were used in the present study:

Personal data sheet:

Will the help of this Personnel data sheet, the information about area, Gender, Stream was collected. Scale for Psychomatic symptoms and suicidal ideation:

Psychological well-being scale will be used for this study. This scale is developed standardize by Bhogle and Prakash (1885) and Gujrati Translation Done by Suvera.

Statistical analysis:

Analysis of “F-ANOVA and r-Correlation” statistic techniques were used.

VI. RESULT AND DISCUSSION

Table no.1, Mean and SD of Psychomatic Symptoms in students with reference to are.

		RURAL		URBAN	
		Male	Female	Female	Male
ARTS	Mean	1.37	1.60	1.20	1.53
	SD	0.81	0.56	0.85	0.51
	N	30	30	30	30
COMMERCE	Mean	1.80	1.70	1.97	1.80
	SD	0.41	0.53	0.18	0.48
	N	30	30	30	30

Table no.2, “F” of psychomatic symptoms in students 2×2×2 score

SOURCE OF VARIABLES	SUM OF SQUARE	DF	MEAN SQUARE	F	SIG.
AREA-A	0.267	1	0.267	0.603	NS
GENDER - B	0.067	1	0,067	0.515	NS
STREAM -C	10.417	1	10.417	23.570	**
A*B	8.067	1	8.067	18.252	**
A*C	0.817	1	0.817	1.848	NS
B*C	4.817	1	4.817	10.899	**
A*B*C	1.350	1	1.350	3.055	NS
SSW	102.533	232	0.442		

Table no. 3, Mean score and difference of Mean regarding psychomatic symptoms in

INDEPENDENT VARIABLE	N	MEAN	DIFFERENCE BETWEEN MEAN
RURAL A1	120	1.38	-0.07
URBAN A2	120	1.45	
MALE B1	120	1.40	-0.03
FEMALE B2	120	1.43	
ARTS C1	120	1.21	-0.41
COMMERCE C2	120	1.62	

H01 PSYCHOMATIC SYMPTOMS IN STUDENTS
WITH REFERENCE TO AREA:

The F value (table No. 2) 0.603 and which is Statistically not significant. Table no. 3 reveals that the

mean score of students of Rural area is 1.38 and Urban area is 1.45 respectively and difference between two is -0.07 which is negligible. Hence the null hypothesis no.1 is maintained and it is concluded that. There is no significant difference between psychomatic symptoms in students with reference to area.

H02 PSYCHOMATIC SYMPTOMS IN STUDENTS WITH REFERENCE TO GENDER:

The f value (table no.2) 0.515 and which is statistically not significant. table no. 3 shows that the mean score of students based on gender is 1.40 and 1.43 respectively and difference between is -0.03 which is insignificant. Hence the null hypothesis no.2 is accepted and the result shows that there is no significant difference between psychomatic symptoms in students based on gender.

H03 PSYCHOMATIC SYMPTOMS IN STUDENTS WITH REFERENCE TO DIFFERENT STREAMS:

The f value (table no.2) is 23. 570 and which is statistically significant at 0.01 level. Table no.3 presents mean score of students according to different streams is 1.21 and 1.62 respectively and difference between is -0.41 which is marked. Hence the null hypothesis no.3 is disproven.

H04 PSYCHOMATIC SYMPTOMS IN STUDENTS WITH REFERENCE TO AREA AND GENDER:

The f value (table no.2) is 18.252 which is statistically significant at 0.01 level. Table no. 3 indicates mean score of students in terms of area rural is 1.38 and urban 1.45 also in terms of gender is 1.40 and 1.43 and

difference between them is -0.07 and -0.03 which is noticeable. Hence the null hypothesis no.4 is not supported.

H05 PSYCHOMATIC SYMPTOMS IN STUDENTS WITH REFERENCE TO AREA AND STREAM:

The f value (table no.2) is 1.848 which is statistically not significant. Table no. 3 suggests mean score of students in terms of area rural is 1.38 and urban 1.45 also in terms of streams Arts is 1.21 and commerce is 1.62 and difference between them is -0.07 and -0.41 which is hardly noticeable. Hence the null hypothesis no.5 is supported.

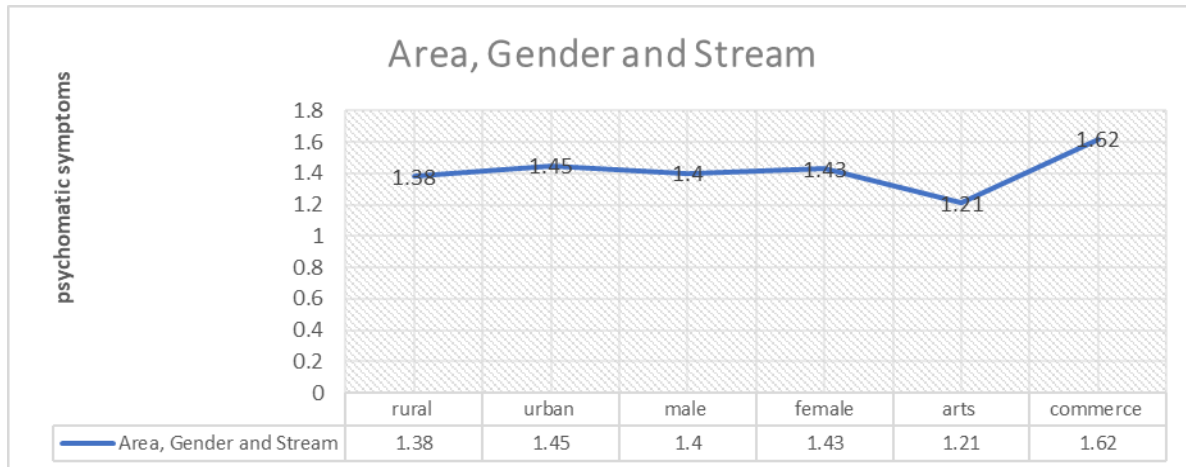
H06 PSYCHOMATIC SYMPTOMS IN STUDENTS WITH REFERENCE TO GENDER AND STREAM:

The f value (table no.2) is 10.899 which is statistically significant at 0.01 level. Table no. 3 highlights mean score of students across Gender male is 1.40 and female 1.43 also in terms of streams Arts is 1.21 and commerce is 1.62 and difference between them is -0.03 and -0.41 which is significant. Hence the null hypothesis no.6 is failed.

H07 PSYCHOMATIC SYMPTOMS IN STUDENTS WITH REFERENCE TO AREA, GENDER AND STREAM:

The f value (table no.2) is 3.055 which is statistically not significant. Table no. 3 highlights mean score of students across area rural is 1.38 and urban is 1.45, Gender male is 1.40 and female 1.43 also in terms of streams Arts is 1.21 and commerce is 1.62 and difference between them is -0.07, -0.03 and -0.41 which is not significant. Hence the null hypothesis no.7 is proven.

Chart no. 1, Demographic characteristics of students with reference to area, gender and stream.



VII. SUICIDAL IDEATION

Table no.4, Mean and SD of suicidal ideation in students with reference to area,

		RURAL		URBAN	
		MALE	FEMALE	MALE	FEMALE
ARTS	MEAN	1.50	1.53	1.57	1.87
	SD	0.68	0.68	0.77	0.43
	N	30	30	30	30
COMMERCE	MEAN	1.93	1.67	1.87	1.83
	SD	0.25	0.61	0.34	0.46
	N	30	30	30	30

Table no.5, “F” of psychomatic symptoms in students 2×2×2 score

SOURCE OF VARIABLES	SUM OF SQUARE	DF	MEAN SQUARE	F	SIG.
AREA-A	0.938	1	0.938	3.022	NS
GENDER - B	0.004	1	0.004	0.013	NS
STREAM -C	2.604	1	2.604	8.395	**
A*B	0.938	1	0.938	3.022	NS
A*C	0.338	1	0.338	1.088	NS
B*C	1.504	1	1.504	4.849	**
A*B*C	0.004	1	0.004	0.013	NS
SSW	71.967	232	0.31		

Table no. 6, Mean score and difference of Mean regarding psychomatic symptoms in students with reference to area, gender and stream (N=240)

INDEPENDENT VARIABLE	N	MEAN	DIFFERENCE BETWEEN MEAN
RURAL A1	120	1.66	-0.12

URBAN A2	120	1.78	0
MALE B1	120	1.72	
FEMALE B2	120	1.72	
ARTS C1	120	1.62	-0.2
COMMERCE C2	120	1.82	

H08 SUICIDAL IDEATION IN STUDENTS WITH REFERENCE TO AREA:

The F value (table No. 5) 3.022 and which is Statistically not significant. Table no. 3 reveals that the mean score of students of Rural area is 1.66 and Urban area is 1.78 respectively and difference between two is -0.12 which is negligible. Hence the null hypothesis no.8 is maintained and it is concluded that. There is no significant difference between suicidal ideation in students with reference to area.

H09 SUICIDAL IDEATION IN STUDENTS WITH REFERENCE TO GENDER:

The f value (table no.5) 0.013 and which is statistically not significant. table no. 3 shows that the mean score of students based on gender is 1.72 and 1.72 respectively and difference between is 0 which is insignificant. Hence the null hypothesis no.9 is accepted and the result shows that there is no significant difference between suicidal ideation in students based on gender.

H010 SUICIDAL IDEATION IN STUDENTS WITH REFERENCE TO DIFFERENT STREAMS:

The f value (table no.5) is 8.395 and which is statistically significant at 0.01 level. Table no.3 presents mean score of students according to different streams is 1.62 and 1.82 respectively and difference between is -0.2 which is marked. Hence the null hypothesis no.10 is disproven.

H011 SUICIDAL IDEATION IN STUDENTS WITH REFERENCE TO AREA AND GENDER:

The f value (table no.5) is 3.022 which is statistically not significant. Table no. 3 indicates mean score of

students in terms of area rural is 1.66 and urban 1.78 also in terms of gender is 1.72 and 1.72 and difference between them is -0.12 and 0 which is unnoticeable. Hence the null hypothesis no.11 is supported.

H012 SUICIDAL IDEATION IN STUDENTS WITH REFERENCE TO AREA AND STREAM:

The f value (table no.5) is 1.088 which is statistically not significant. Table no. 3 suggests mean score of students in terms of area rural is 1.66 and urban 1.78 also in terms of streams Arts is 1.62 and commerce is 1.82 and difference between them is -0.12 and -0.2 which is n hardly noticeable. Hence the null hypothesis no.12 is supported.

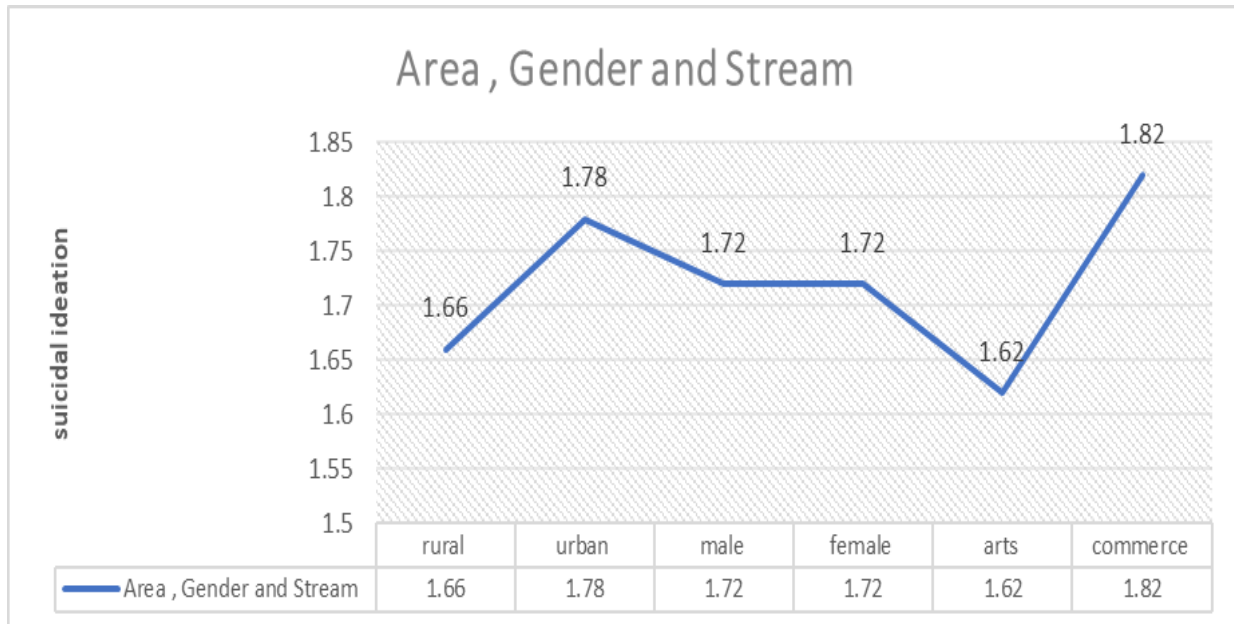
H013 SUICIDAL IDEATION IN STUDENTS WITH REFERENCE TO GENDER AND STREAM:

The f value (table no.5) is 4.849 which is statistically significant at 0.05 level. Table no. 3 highlights mean score of students across Gender male is 1.72 and female 1.72 also in terms of streams Arts is 1.62 and commerce is 1.82 and difference between them is 0 and -0.2 which is significant. Hence the null hypothesis no.13 is failed.

H014 SUICIDAL IDEATION IN STUDENTS WITH REFERENCE TO AREA, GENDER AND STREAM:

The f value (table no.5) is 0.013 which is statistically not significant. Table no. 3 highlights mean score of students across area rural is 1.66 and urban is 1.78, Gender male is 1.72 and female 1.72 also in terms of streams Arts is 1.62 and commerce is 1.82 and difference between them is -0.12, 0 and -0.2 which is not significant. Hence the null hypothesis no.14 is proven.

Chart no. 2, Demographic characteristics of students with reference to area, gender and stream.



VIII. CORRELATION

Table no.7, correlation Psychomatic Symptoms and suicidal ideation among students.

	psychomatic symptoms	Suicidal ideation
psychomatic symptoms	Pearson correlation	1
	sig. (2-tailed)	0
	N	240
suicidal ideation	Pearson correlation	.338**
	sig. (2-tailed)	0
	N	240

Table no.8, Mean and SD of Psychomatic Symptoms and suicidal ideation among students.

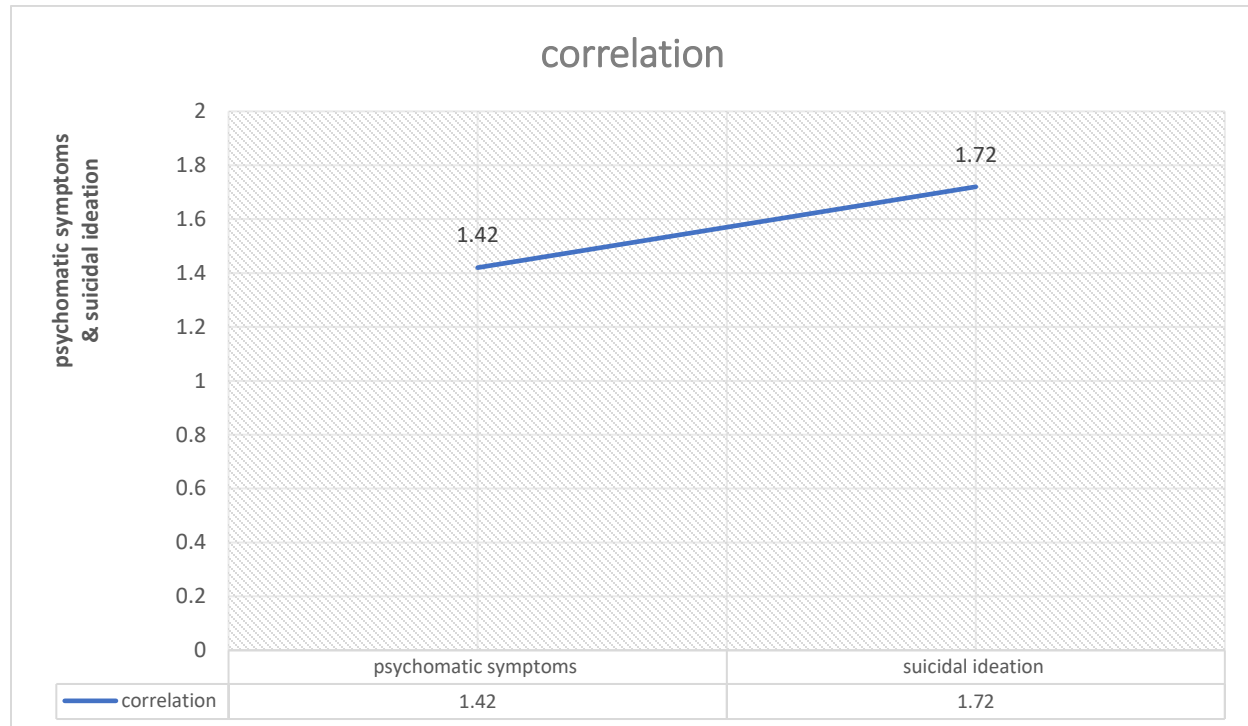
	N	mean	std. deviation
psychomatic symptoms	240	1.42	0.733
suicidal ideation	240	1.72	0.572

H015 correlation between psychomatic symptoms and suicidal ideation.

The Pearson correlation between psychomatic symptoms and suicidal ideation is $r = 0.338$, which is significant at 0.01 level. That indicates a moderate

positive relationship between the two variables. The significance value $p = 0$, which is less than 0.01, it shows significant relation so here hypothesis 15 is not supported.

Chart no. 3, Demographic characteristics of correlation between psychomatic symptoms and suicidal ideation.



IX. CONCLUSION

1. Stream and gender influence students' psychomatic symptoms and suicidal ideation,
2. Area does not show any significant effect.
3. There is a significant correlation between psychomatic symptoms and suicidal ideation; here student with higher psychomatic symptoms also enhance higher suicidal ideation.
4. Therefore, mental health interventions should consider stream and gender related factors to support student wellbeing.

X. LIMITATIONS

1. Present studies were done and only selected Kheda district and its surrounding Ares so result cannot be applied over the area to other districts.
2. Since the study included only 240 participants, the sample size is relatively small; therefore, the findings cannot be considered universal or fully generalizable to the wilder student population.
3. The sample is limited only to arts and commerce students; therefore, the findings may not be

applicable to students from other academic streams.

4. Only BA students were included as participants, which limits the generalizability of the findings to students from other academic background.

REFERENCE

- [1] Sharma, R., & Singh, A. (2020). Psychosomatic symptoms among college students in India. *Indian Journal of Psychology*, 45(2), 112–120.
- [2] Singh, D., & Raina, P. (2017). Relationship between stress, psychosomatic symptoms, and suicidal ideation. *Indian Journal of Social Psychiatry*, 33(2), 56–64.
- [3] Smith, J., & Brown, L. (2018). Psychosomatic symptoms and suicidal ideation among university students. *Journal of Adolescent Health*, 62(5), 546–553.
- [4] Miller, A., & Thompson, K. (2020). Mental health patterns in young adults: Psychosomatic focus. *International Journal of Psychology*, 55(2), 123–134.

- [5] Garcia, P., & Martinez, L. (2017). Academic stress and suicidal ideation in higher education. *Journal of Youth Studies*, 20(6), 751–765.
- [6] Wilson, T., & Green, S. (2018). Psychosomatic complaints as predictors of suicidal ideation. *Clinical Psychology Review*, 61, 45–56.
- [7] Lopez, F., & Hernandez, R. (2019). University students' mental health and psychosomatic symptoms. *Frontiers in Psychology*, 10, 874.
- [8] Chen, Y., & Zhang, X. (2020). Stress, psychosomatic symptoms, and suicidal thoughts in adolescents. *Asian Journal of Psychiatry*, 50, 101965.
- [9] Gupta, P., & Mehta, S. (2019). Suicidal ideation and stress in Indian university students. *Journal of Mental Health Studies*, 12(3), 55–63.
- [10] Nguyen, T., & Pham, H. (2021). Relationship between academic stress, psychosomatic symptoms, and suicidal ideation. *Child and Adolescent Psychiatry and Mental Health*, 15(1), 40.
- [11] Reddy, K. S., & Rao, V. (2018). Prevalence of psychosomatic symptoms in Indian adolescents. *Indian Journal of Psychiatry*, 60(4), 405–412.
- [12] Kumar, V., & Chawla, N. (2017). Stress and suicidal ideation in Indian students: A correlational study. *Indian Journal of Clinical Psychology*, 44(2), 145–152.
- [13] Desai, R., & Shah, H. (2020). Mental health awareness and psychosomatic complaints in Indian youth. *Journal of Indian Psychology*, 36(1), 10–18.
- [14] <https://www.in.gov/issp>
- [15] <https://pmc.ncbi.nlm.nih.gov/articles/PMC11885408>.