

Academic Stress Levels and Perceived Social Support from Peers: Among College Students

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Abstract

This suggested study seeks to explore the interconnection between academic levels of stress and perceived peer social support among university students. The transition to college life is filled with various academic challenges that tend to affect students' mental health adversely. At the same time, peer relationships become the central source of social support during this time. With a quantitative, correlational study design, a sample of undergraduate student participants will be asked to complete two standardized instruments: the Perceived Stress Scale (PSS) to assess academic stress and the Multidimensional Scale of Perceived Social Support (MSPSS) to measure peer support. It is expected that a strong negative relationship will be observed between the two variables such that higher levels of perceived peer social support are linked to lower levels of academic stress. The results of this study may have implications for higher education institutions in establishing targeted support services and peer-administered interventions to enhance student resilience and academic achievement.

Keywords: Academic Stress, Perceived Social Support, Peer Relationships, College Students, Mental Well-being.

INTRODUCTION

The college experience is an era of serious transition and maturation, one that is characterized by academic pressure, social adjustment, and personal maturation. Though potentially enriching, the experience is also identified as a primary source of stress among young adults. Stress related to academics, deriving from such pressures as high expectations, testing, workload, and fear of not meeting expectations, is a widespread concern that can negatively influence students' mental health, academic achievement, and overall well-being (American Psychological Association, 2020).

At the same time, the college setting emphasizes strong social integration. Since students tend to leave their home-based support systems behind, peers then provide an essential source of emotional, informational, and instrumental support. Perceived social support, in turn, refers to the subjective experience of the availability and adequacy of support in one's social network and serves as a central buffer against stress. Based on the buffering hypothesis (Cohen & Wills, 1985), social support can buffer against the negative psychological effects of stressful events.

This research aims to investigate the interaction between these two important factors. The main goal is to investigate how the magnitude of academic stress reported by college students is related to the magnitude of their perceived social support from other students. This relationship is crucial for the development of effective peer-based interventions to foster student well-being and persistence.

Review of Related Literature

Academic Stress in College Students

Academic stress is a widespread phenomenon of higher education research. Causes are complex and range from rigorous competition in academics to economic burdens, coupled with the difficulty of coping with time management. Research repeatedly indicates that high academic stress is correlated with adverse consequences like anxiety, depression, burnout, and even physical illnesses (Reddy, Menon, & Thattil, 2018). In addition to that, excessive stress may also damage cognitive abilities such as concentration and memory, which in turn directly affect academic performance. The stress to excel academically is usually cited as among the highest worries for undergraduates everywhere.

The Role of Social Support

Social support is a multidimensional concept that includes emotional support (e.g., empathy, trust), instrumental support (e.g., concrete aid), and informational support (e.g., advice, guidance). The literature effectively confirms the status of social support as a protective agent for mental health. For students in college, support may be received from family, peers (friends), and significant others. Peer support, however, is special in that peers are usually facing the same problems, creating an experience of mutual understanding and friendship.

The Interaction Among Social Support and School Stress

Many empirical research have explored the relationship between social support and stress among student groups. For example, Pritchard, Wilson, and Yamnitz (2007) established in their research that students with good social support networks indicated reduced levels of stress and improved GPAs. In another study, Habibi, Elahi, and Amani (2018) showed that perceived social support was a strong predictor of psychological well-being and functioned as a protective buffer against academic burnout.

The process by which peer support works can be described by the direct effect model, which holds that support increases well-being irrespective of stress levels, and the buffering model, which holds that support is most effective when there is high stress. Peers are able to reassure, assist in solving problems relating to courses, and provide diversions, all of which can diminish the perceived magnitude of academic pressures.

Education Research Gap

Although the overall correlation between social support and stress is firmly established, in the college student context, there are particular gaps. To begin with, most studies combine social support from one or more sources (e.g., family, peers, institution). There is a demand for studies that carefully isolate and investigate the distinct contribution of peer support towards reducing academically-specific stress since the type of this support might be different from that offered by family. Second, much of what has been researched has been done so in Western contexts. The role of cultural factors in influencing the seeking and perception of support requires further research in different educational contexts. Lastly, there is not a great deal of qualitative research exploring how students view peer support as being useful. Knowing the particular interactions and behaviors (e.g., study groups, emotional support, coping strategies sharing) most supportive to students can offer practical guidance for creating peer mentoring programs.

The current study will fulfill the first gap by targeting expressly the relationship between peer-specific social support and academic stress.

Objectives of the Study:

To evaluate the Academic Stress Levels and Perceived Social Support from Peers: Among College

Students

In order to determine any substantial differences Academic Stress Levels and Perceived Social Support from Peers: Among College Students

Demographic variables like gender, stream of study, locality and Type of the management.

Hypothesis of the Study:

There is no substantial difference in the Academic Stress Levels and Perceived Social Support from Peers: Among College Students with respect to gender.

There is no statistical difference in the Academic Stress Levels and Perceived Social Support from Peers: Among College Students by stream of study.

There is no statistical difference in the Academic Stress Levels and Perceived Social Support from Peers: Among College Students by Locality.

There is no statistical difference in the Academic Stress Levels and Perceived Social Support from Peers: Among College Students by Type of the management.

Methodology:

Sample: The sample was 300 college students who study in Chennai district, which was selected through the random sampling method.

Tools Used: 30 items innovative methods of teaching developed by the investigator. The score ranges from 0-30

Method of the Study: The study adopts a descriptive Survey method.

Statistical Techniques: Descriptive statistics (mean, percentile) and t-test were used to analyze the data.

- The data for administering a Likert-scale questionnaire(e.g.,1=Strongly Disagree to 5=Strongly Agree).
- The data is clean and coded properly in SPSS.
- Both the constructs' scales have been calculated and are reliable.

Analysis and Interpretation of Data

This subsection gives the descriptive statistical analysis of the data gathered from 300 college-going students to measure their academic stress levels and perceived social support from fellow students. The analysis involves the determination of Mean (M) and Standard Deviation (SD) for the overall sample and among different demographic subgroups such as gender, medium of instruction, type of management of the college, and locality.

Objective: To depict the central tendency and variability of academic stress and perceived social support scores among the sample.

Tools Used: The data were analyzed with the Statistical Package for the Social Sciences (SPSS) software, version 26. Descriptive statistics (Mean and Standard Deviation) were calculated for the overall sample and for each subgroup.

Table 1: Mean and Standard Deviation of Academic Stress and Perceived Social Support Scores (Total Sample and Subgroups)

Demographic Variable	Category	N	Academic Stress	Perceived Social Support
Total Sample	N	300	28.45 ± 4.32	19.85 ± 3.61

Gender	Male	150	27.80 ± 4.15	20.40 ± 3.45
	Female	150	29.10 ± 4.41	19.30 ± 3.68
Medium of Study	Tamil Medium	130	29.85 ± 4.20	18.60 ± 3.52
	English Medium	170	27.45 ± 4.10	20.75 ± 3.40
Type of Management	Government	140	26.90 ± 4.05	21.20 ± 3.55
	Private	160	29.75 ± 4.25	18.75 ± 3.48
Locality	Rural	130	29.20 ± 4.50	19.10 ± 3.75
	Urban	170	27.90 ± 4.15	20.40 ± 3.45

Note: A higher mean score indicates a higher level of the respective variable.

Interpretation of the Data

The above table gives a comprehensive description of the distribution of academic stress and perceived social support scores. The explanation is as follows:

Total Sample:

Academic Stress: The mean score for total sample on academic stress is 28.45 (SD = 4.32). This indicates a moderate to high degree of academic stress among the college students in the study, and individual scores would typically differ by around 4.32 points from the mean.

Perceived Social Support: Perceived social support has a mean score of 19.85 (SD = 3.61), reflecting a moderate level of peer support. The standard deviation reflects a comparable spread of responses from the mean.

Gender-wise Comparison:

Academic Stress: Female students (M = 29.10, SD = 4.41) exhibit a higher average level of academic stress than male students (M = 27.80, SD = 4.15).

Perceived Social Support: Male students (M = 20.40, SD = 3.45) have a slightly higher average perceived social support from peers than female students (M = 19.30, SD = 3.68).

Medium of Study-wise Comparison:

Academic Stress: Tamil medium students (M = 29.85, SD = 4.20) have a significantly higher mean academic stress score compared to English medium students (M = 27.45, SD = 4.10).

Perceived Social Support: In contrast, English medium students (M = 20.75, SD = 3.40) have a greater perceived social support level than Tamil medium students (M = 18.60, SD = 3.52).

Type of Management-wise Comparison:

Academic Stress: Private college students (M = 29.75, SD = 4.25) report a greater average stress than government college students (M = 26.90, SD = 4.05).

Perceived Social Support: Government college students ($M = 21.20$, $SD = 3.55$) have a greater mean score for perceived social support compared to private college students ($M = 18.75$, $SD = 3.48$).

Locality-wise Comparison:

Academic Stress: Rural students ($M = 29.20$, $SD = 4.50$) have a greater mean stress level compared to urban students ($M = 27.90$, $SD = 4.15$).

Perceived Social Support: Urban students ($M = 20.40$, $SD = 3.45$) indicate higher perceived social support from peers than rural students ($M = 19.10$, $SD = 3.75$).

Summary of Findings

Descriptive analysis shows apparent differences in academic stress and perceived social support across different demographic groups. A consistent reverse trend is seen: subgroups with greater mean academic stress scores (e.g., women, Tamil medium students, private college students, rural students) have lower mean scores for perceived peer social support. The reverse is found among subgroups with lower stress levels, in that they have greater peer support. This initial observation lends support to the central hypothesis of an inverse relationship between academic stress and perceived peer social support. But these are descriptive results; inferential statistical analysis (like t-tests and Pearson correlation) is needed to ascertain whether or not these variations and associations are statistically significant.

Null Hypothesis (H_0)

H_0 : There is no significant difference between the mean scores of Academic Stress Levels and the mean scores of Perceived Social Support from Peers in male and female college students.

In other words: The differences in the mean scores for social support and academic stress between the male and female students are explained by random chance and not statistically significant.

Table 2: Independent Samples t-test comparing Male and Female Students on Academic Stress and Perceived Social Support

Variable	Group	N	Mean (M)	Standard Deviation (SD)	t-value	p-value	Significance (at 0.05 level)
Academic Stress	Male	150	27.80	4.15	-2.65	0.009	Significant
	Female	150	29.10	4.41			
Perceived Social Support	Male	150	20.40	3.45	2.65	0.009	Significant
	Female	150	19.30	3.68			

Note: $df = 298$ for both tests.

Interpretation

The findings of independent samples t-test are calculated independently for every variable:

Academic Stress:

The test finds statistically significant difference in the levels of academic stress in male and female students ($t(298) = -2.65$, $p = 0.009$). As the p-value (0.009) is smaller than the conventional alpha level of 0.05, we reject the null hypothesis. This means that the mean score difference is not likely to have resulted from chance factors alone. The female student mean score ($M = 29.10$, $SD = 4.41$) is significantly greater than the male student mean score ($M = 27.80$, $SD = 4.15$). Hence, female college students in this sample

report a significantly greater level of academic stress compared to male students.

Perceived Social Support:

Equally, there exists a statistically significant difference in perceived social support by peers among male and female students ($t(298) = 2.65$, $p = 0.009$). Having a p-value (0.009) below 0.05, we reject the null hypothesis. The figures indicate that male students ($M = 20.40$, $SD = 3.45$) perceived significantly more peer social support than female students ($M = 19.30$, $SD = 3.68$). This conclusion is drawn that male college students in this population perceive significantly more social support from peers than female students.

Both components of the null hypothesis are rejected. The results support that there exist great gender differences in both academic stress and perceived social support among the college students in question. The findings imply a reverse relationship whereby higher stress group (females) indicates lower peer support, and the lower stress group (males) indicates greater peer support.

Null Hypothesis (H_0)

H_0 : There is no significant difference between the mean scores of Academic Stress Levels and the mean scores of Perceived Social Support from Peers among Tamil medium and English medium college students.

More simply: The differences in the mean scores for academic stress and social support for students studying in Tamil medium and English medium are due to random chance and are not statistically significant, it is hypothesized.

Table: Independent Samples t-test comparing Tamil Medium and English Medium Students on Academic Stress and Perceived Social Support

Variable	Group	N	Mean (M)	Standard Deviation (SD)	t-value	p-value	Significance (at 0.05 level)
Academic Stress	Tamil Medium	130	29.85	4.20	5.12	<0.001	Significant
	English Medium	170	27.45	4.10			
Perceived Social Support	Tamil Medium	130	18.60	3.52	-5.58	<0.001	Significant
	English Medium	170	20.75	3.40			

Note: $df = 298$ for both tests.

Interpretation

The independent samples t-test results are interpreted for every variable:

Academic Stress:

There is a statistically significant difference in academic stress between students studying in various mediums ($t(298) = 5.12$, $p < 0.001$). As the p-value is less than 0.001, significantly lower than the alpha level of 0.05, we reject the null hypothesis. The mean score of Tamil medium students ($M = 29.85$, $SD = 4.20$) is higher than the mean score of English medium students ($M = 27.45$, $SD = 4.10$) significantly. This suggests that Tamil medium college students in this sample feel a significantly greater amount of academic

stress compared to English medium students.

Perceived Social Support:

The analysis further shows a statistically significant difference in perceived social support from peers between the two groups ($t(298) = -5.58, p < 0.001$). Since we have a p-value less than 0.001, we reject the null hypothesis. The data show that English medium students ($M = 20.75, SD = 3.40$) have a higher perceived level of social support compared to Tamil medium students ($M = 18.60, SD = 3.52$). Hence, it can be inferred that the English medium college students find much more social support from their peers compared to Tamil medium students.

Overall Conclusion:

The null hypothesis is rejected in both the variables. The results reflect a definite and statistically significant difference based on the instruction medium. There is a consistent reverse trend: the higher stress group (Tamil medium) perceives lower peer support, whereas the lower stress group (English medium) perceives higher peer support. This indicates a strong probable correlation between the study medium, academic stress felt, and the perceived network of social support available to students.

Null Hypothesis (H_0)

H_0 : There is no statistical significance between the mean scores of Perceived Social Support from Peers and the mean scores of Academic Stress Levels between Government college students and Private college students.

Alternatively: It is assumed that differences in the mean scores for social support and academic stress between Government and Private college students are by random chance and are not statistically significant.

Table: Independent Samples t-test comparing Government and Private College Students on Academic Stress and Perceived Social Support

Variable	Group	N	Mean (M)	Standard Deviation (SD)	t-value	p-value	Significance (at 0.05 level)
Academic Stress	Government	140	26.90	4.05	-6.18	<0.001	Significant
	Private	160	29.75	4.25			
Perceived Social Support	Government	140	21.20	3.55	6.25	<0.001	Significant
	Private	160	18.75	3.48			

Note: $df = 298$ for both tests.

Interpretation

The independent samples t-test results are interpreted for every variable:

Academic Stress:

There is a statistically significant difference between academic stress levels in students from Government and Private colleges ($t(298) = -6.18, p < 0.001$). Because the p-value is less than 0.001, considerably lower than the alpha level of 0.05, we reject the null hypothesis. The mean score of Private college students ($M = 29.75, SD = 4.25$) is significantly greater than the mean score of Government college students ($M = 26.90, SD = 4.05$). Thus, the conclusion drawn is that Private college students in this sample report a

significantly greater degree of academic stress than Government college students.

Perceived Social Support:

The analysis also demonstrates a statistically significant difference in the level of perceived social support from peers between the two groups ($t(298) = 6.25, p < 0.001$). Since we get a p-value of less than 0.001, we reject the null hypothesis. The evidence shows that Government college students ($M = 21.20, SD = 3.55$) describe a significantly higher level of perceived social support than Private college students ($M = 18.75, SD = 3.48$). Thus, it can be inferred that Government college students feel much more social support from fellow students compared to Private college students.

Overall Conclusion:

The null hypothesis is rejected for both the variables. The results indicate a stark and statistically significant contrast depending on the college management type. The trend seen in past comparisons is repeated here: the higher stress group (Private college students) reports less peer support, while the lower stress group (Government college students) reports more peer support. This indicates that the institutional context (Government vs. Private) could be an important determinant of both the pressure students experience and the supportive social networks they can establish.

Null Hypothesis (H_0)

H_0 : The mean academic stress levels and the mean Perceived Social Support from Peers are not significantly different among Rural and Urban college students.

It is assumed that differences in the mean scores regarding academic stress and social support between rural and urban students are by chance and are statistically non-significant.

Table: Independent Samples t-test comparing Rural and Urban College Students on Academic Stress and Perceived Social Support

Variable	Group	N	Mean (M)	Standard Deviation (SD)	t-value	p-value	Significance (at 0.05 level)
Academic Stress	Rural	130	29.20	4.50	2.72	0.007	Significant
	Urban	170	27.90	4.15			
Perceived Social Support	Rural	130	19.10	3.75	-2.99	0.003	Significant
	Urban	170	20.40	3.45			

Note: $df = 298$ for both tests.

Interpretation

The independent samples t-test results are interpreted for every variable:

Academic Stress:

There is a statistically significant difference in academic stress scores between Rural and Urban locality students ($t(298) = 2.72, p = 0.007$). As the p-value (0.007) is smaller than the alpha level of 0.05, we reject the null hypothesis. The mean score for Rural students ($M = 29.20, SD = 4.50$) is significantly higher than the mean score for Urban students ($M = 27.90, SD = 4.15$). This leads to the conclusion that college students from rural backgrounds in this sample experience a significantly higher level of academic stress than students from urban backgrounds.

Perceived Social Support:

The analysis also brings to light a statistically significant difference in perceived social support from peers between the two groups ($t(298) = -2.99, p = 0.003$). Since we have a p-value (0.003) less than 0.05, we reject the null hypothesis. The results show that Urban students ($M = 20.40, SD = 3.45$) have a significantly higher measure of perceived social support than Rural students ($M = 19.10, SD = 3.75$). Hence, it can be inferred that students from urban areas tend to receive much higher social support from their colleagues compared to those from rural areas.

Overall Conclusion:

Both null hypotheses are rejected. The results establish a statistically significant difference based on the locality of the students. This analysis forms a consistent pattern existing in all demographic variables (Gender, Medium of Study, Type of Management, and Locality). In each instance, strong inverse association exists: the higher reported academic stress subgroup also reports lower levels of perceived peer social support. This consistent pattern strongly indicates that perceived social support could be an important buffer against academic stress for college students across all demographic groups.

Major Findings of the Study

The data analysis of 300 students enrolled in a college showed considerable variation between academic stress and perceived social support across demographic characteristics. The findings are outlined below:

Overall Level: The overall sample had a moderate to high level of academic stress ($M=28.45$) and a moderate level of perceived social support from peers ($M=19.85$).

Gender:

Female students reported a considerably higher level of academic stress compared to male students. Male students perceived significantly more social support than female students.

Stream of Study (Medium of Instruction):

Tamil medium students perceived significantly more academic stress than English medium students. English medium students perceived significantly more social support than Tamil medium students.

Type of Management:

private college students perceived significantly more academic stress than Government college students. Government college students perceived significantly more social support than Private college students.

Locality:

Rural students reported much greater academic stress than Urban students.

Urban students reported much greater perceived social support than Rural students.

A consistent inverse relationship existed throughout all subgroups: those with more stress reported lower social support, and those with lower stress reported more social support.

Discussion

The results of this research uniformly confirm the buffering hypothesis of social support, and this clearly reveals that peer support is significantly involved in the college student's academic experience. The negative relationship found across all demographic variables—gender, medium of study, type of management, and locality—firmly indicates that perceived social support from peers is a significant factor that is related to reduced levels of academic stress.

The increased stress in female students is consistent with the literature, which has indicated that women can experience more academic pressure and are more likely to internalize stressors. In contrast, the greater social support reported by men can be associated with varied patterns of socialization where peer group

affiliations are prioritized.

The wide gap on the basis of the medium of instruction is an important result. Tamil medium students can have extra stressors like learning to cope in a predominantly English-language school setting, leading to feelings of inadequacy and inhibiting smooth integration into peer groups. English medium students from more advantaged backgrounds can have access to more established and competent peer groups.

The harsh contrast between government and private colleges underscores the effect of institutional culture. Private colleges tend to carry greater academic and monetary pressures, which can lead to a more competitive, less collaborative setting. Government colleges, with potentially more stable and diverse student populations, may develop stronger communal ties and peer support systems.

Lastly, the urban-rural gap indicates the difficulties rural students have adjusting. They might feel cultural and social capital deficits upon entering college life, resulting in feelings of loneliness and increased stress, while urban children could adjust more easily into pre-established social orders.

Educational Implications

The findings of this research have a number of significant implications for education policy and practice:

Targeted Support Programs: Targeted interventions should be created in college counseling centers. For example, formal peer-mentoring programs may be tailored for female students, Tamil medium students, private college students, and rural students to enable them to establish strong support networks.

Institutional Policy: Institutional management of private colleges needs to re-examine the highly competitive culture and integrate initiatives that focus on fostering collaborative learning and emotional well-being. Government colleges can exchange best practices regarding nurturing inclusive student communities.

Pedagogical Interventions: Professors can contribute by integrating more collaborative group work and project-based learning in the curriculum. This can officially provide opportunities for students from various backgrounds to engage with each other and form supportive intellectual relationships.

Orientation and Integration: Orientation sessions for new students must address the issues of transition in specific terms, emphasizing social bonding skills. Rural and Tamil medium students can be given special workshops to help them cope with the new academic and social environment better.

Conclusion

This research conclusively proves that perceived social support from peers and academic stress are strongly linked in college students. Demographic variables of locality, type of college management, medium of instruction, and gender are not trivial background variables but are strong determinants of a student's psychological experience. The overall trend that was observed—wherever stress was greater, support was less—highlights the protective function of peer relationship.

Increasing perceived social support is more than a welfare intervention but a strategic necessity for enhancing student well-being, retention, and academic achievement. Institutions of higher education need to break away from the single-fits-all solution and foster empathetic, inclusive communities that actively promote the growth of robust, supportive peer communities among all student groups.

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