

Original Article

Academic Stress and Emotional Well-Being among Secondary School Students in Bihar: A Gender-Based Examination within the Stress-Appraisal Perspective

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Abstract

The academic stress has turned into a kind of trademark in the lives of adolescents in most regions of India, especially in states where education levels are directly linked to social mobility. Based on the transactional stress-appraisal model (Lazarus and Folkman, 1984), the current research investigated the gender variation in academic stress and emotional well-being among students in Bihar secondary school. A cross-sectional survey was carried out on 200 teenagers (100 boys and 100 girls) among the age group of 14-16 years who attended either government or private schools. Perceived academic stress and positive emotional well-being were measured with the help of standardized tools.

The independent samples t-tests showed a important alteration in the levels of academic stress in girls and emotional well being among boys. The results of the correlational analysis were found to have a strong undesirable relationship between emotional well-being and academic stress. Hierarchical regression also revealed that even though gender predicted differences in the means of both variables, it did not mediate the association among stress along with well-being. Such results indicate that, although the level of stress faced by males and females may vary, the psychological mechanism in the connection among perceived academic pressure and emotional operation is similar between boys and girls in the competitive educational environment of Bihar.

Introduction

Adolescence is a stage of development that is characterized by a great deal of cognitive development, identity development, and emotional sensitivity. Scholastic success is often made a key measure of capability and success in the future at this time. The achievement of education in the Indian context, and especially in states like Bihar, is not only personally rewarded but has effects that spread beyond that achievement. It is considered to be one of the major avenues to economic stability, social acknowledgement, and social advancement.

The last twenty years have seen a significant growth in education in Bihar. Higher rates of enrollment, scholarship programs by the state and government and more competition in the field of higher education and government jobs have transformed the academic aspiration of the youth. Nevertheless, this growth has been accompanied by structural problems that have remained unresolved such as resource limitation, teacher scarcity and syllabus based assessment structures. All these contextual factors lead to a situation where academic performance gains increased prominence.

In this kind of setting, the academic stress becomes a salient psychological construct. Academic stress does not just have its meaning in the existence of the challenging course work, but rather, in the subjective feeling that the academic demands are more than one can cope with. Lazarus and Folkman (1984) introduced the transactional stress-appraisal model which argues that stress is created when an individual goes through cognitive appraisal processes. People consider the demands (primary appraisal) of the environment and evaluate their ability to meet the demands (secondary appraisal). Academic stressors become triggered because students perceive academic difficulties as unmanageable or potentially hazardous to desired outcomes.



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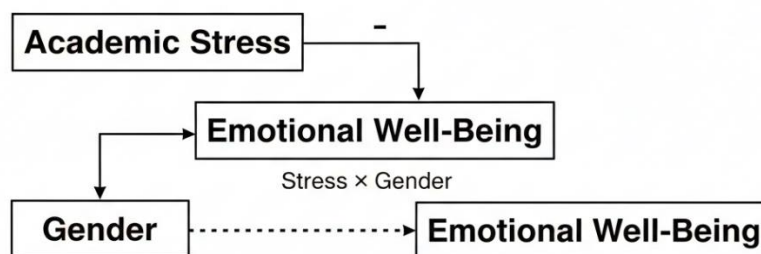
In the systems based on an examination, as is common in Bihar, some educational paths are frequently dictated by board exams and competitive entrance examinations. Individual significance of academic performance may be heightened by the performance rankings, parental expectations of safe employment, and comparison with peers. And in cases where success is equated with family honour or even economic survival, then a student might feel that they are under increased evaluative pressure.

There is regular empirical evidence that a high level of academic stress is associated with negative psychological effects in adolescents. Research has found that academic stress is linked to anxiety symptoms, sleeping disorders, emotional exhaustion, and lower life satisfaction (Deb, Strodl, and Sun, 2015; Pascoe, Hetrick, and Parker, 2020). Although a moderate level of stress can lead to an increase in motivation and interest in work, the process of stress can reduce emotional stability and adaptive functioning in case it is prolonged or too high.

Emotional well-being, on the other hand, indicates optimistic psychological operative and not just the lack of distress. It includes positive affect, resilience, perceived competence and life domain satisfaction (Keyes, 2002). The higher emotional well-being of adolescents is, the more flexible their coping and academic persistence is displayed. Therefore, to achieve sustainable educational development, it is important to study the association among academic stress and emotional well-being.

Regardless of the growing academic competition in Bihar, there is a little empirical research in the region that investigates the psychological effects of academic stress. Much of the available Indian literature has focused on urban populations and this may have ignored contextual issues that are peculiar to the states experiencing a rapid transformation in education. The socio-economic environment in which teenagers would evaluate academic requirements, including rural/urban inequalities, first generation education, and high expectations of parents and relatives, might be influencing in Bihar.

Figure 1. Conceptual Framework of the Study



Gender, Academic Expectations, and Stress Appraisal

The issue of gender variations in academic stress has been reported in a variety of cultural contexts. It is often stated in the research that adolescent girls are more likely to support a greater degree of perceived academic pressure and internalizing distress than boys (Putwain, 2007; Herrmann and Koenig, 2019). A number of explanations have been offered as to this tendency. Girls can be more deeply internal in relation to achievement expectations, more sensitive to evaluative feedback, or use more coping strategies that are rumination-related instead of uninvolvement. Simultaneously, cultural expectations of emotional expression could be a factor in the differences in the gender-based reporting of stress.

In sociocultural context of Bihar, there are gendered expectations regarding education that also deserve some special consideration. Girls now have a greater access to education in recent years due to policy efforts and scholarships. This change is positive social development. But the broadening of the opportunity can be accompanied by an increase in performance reviews. Academic achievement can have an increased symbolic value in families where limited resources are invested on the education of daughters. Girls thus can be empowered as well as performance pressured at the same time.

In boys, the academic demands are commonly put into strictly economic terms. A strong desire is to get a stable job, especially in the government circles, as is the case in most societies. Such expectations might be sources of pressure, but boys can also be taught to appear to be emotionally controlled and resilient. Not only the patterns of coping can be influenced by these norms but also the self-reported emotional well-being.

In the light of the stress-appraisal model (Lazarus and Folkman, 1984), gender might affect the appraisal of academic needs and not the objective needs. Disagreements between them can arise in the areas of perceived threat, perceived coping ability, or emotion regarding academic results. Yet, it is an empirical issue whether gender has a fundamental influence on the structural association among academic stress as well as emotional well-being.

Academic Stress and Emotional Well-Being: Theoretical Linkages

The conceptual model of transactional perfect views stress as the communication between the individual and the environment as dynamic. Emotional strain ensues when academic requirements are evaluated to be more than the resources that one can cope with. The long-term effects of sustained stress appraisal include a decrease in positive affect, self-efficacy, and life gratification.

The previous studies prove that there is a stable negative correlation between perceived academic stress and the markers of emotional well-being (Deb et al., 2015; Pascoe et al., 2020). Learners with continued academic stress tend to complain of diminished optimism, less emotional regulation ability, and diminished psychological balance. Nevertheless, the majority of research has investigated this relationship without measuring moderation.

In this respect, a moderation analysis is theoretically significant. Should gender mediate the stress well being relationship, then it would imply that stress appraisal processes are also not similar in boys and girls. On the other hand, an assumption that the relationship between two genders is statistically consistent would mean that the levels of stress might vary, but the psychological mechanism that is connected to the stress level and leads to the outcomes on emotions is similar.

This clarification is of practical value. In case the stress-well-being relationship is universal, interventions can be implemented in general. Targeted programming might have to be done in case it is moderated by gender.

Research Gap in the Bihar Context

Although there is a growing scholarly competition in the state of Bihar, there is limited literature on stress in adolescents that has empirically investigated this specific topic using a comprehensive theoretical framework. The current state of research on Indian studies is often urban-centric in nature and thus does not pay much attention to state-specific socio-cultural impacts. Also, very limited research incorporates gender comparison and moderation analysis in the same stress-appraisal system.

Since Bihar has been experiencing an impressive educational growth, long-standing socio-economic differences, and changing gender expectations, it is high time and needed to study academic stress and emotional health in the context of this region. Knowledge of the ways adolescents perceive the academic demands in such settings can shape school-based mental health interventions and policy changes.

Objectives of the Study

The present study was designed to address these gaps by pursuing the following objectives:

1. To examine gender differences in perceived academic stress among secondary school students in Bihar.
2. To assess gender differences in emotional well-being.
3. To investigate the association between academic stress and emotional well-being.
4. To determine whether gender moderates the relationship between academic stress and emotional well-being.

Hypotheses

Based on prior empirical findings and the stress-appraisal framework (Lazarus & Folkman, 1984), the following hypotheses were formulated:

- **H1:** Girls will report higher levels of academic stress compared to boys.
- **H2:** Boys will report higher levels of emotional well-being compared to girls.
- **H3:** Academic stress will be negatively associated with emotional well-being.
- **H4:** Gender will moderate the relationship between academic stress and emotional well-being.

By situating the investigation within Bihar's evolving educational landscape, the study aims to contribute region-sensitive evidence to adolescent psychological research and inform intervention strategies that support both academic achievement and emotional sustainability.

Method

Research Design

The present investigation adopted a quantitative, cross-sectional proposal to explained gender differences in academic stress along with emotional well-being among secondary school students in Bihar. The study was correlational in nature, as it aimed to examine both mean-level differences and associations between psychological variables rather than establish causal relationships.

The conceptual grounding of the design was informed by the transactional stress-appraisal perspective (Lazarus & Folkman, 1984), which views stress as a function of subjective interpretation rather than objective workload alone. A cross-sectional approach was considered appropriate because it allowed for the assessment of naturally occurring variations in perceived academic stress and emotional functioning within a defined adolescent population at a single point in time.

Participants

The sample consisted of 200 students enrolled in Grades IX and X across four coeducational secondary schools in Bihar. Equal gender representation was ensured, with 100 boys and 100 girls participating in the study. Individuals beyond in age from 14 to 16 years ($M = 15.02$, $SD = 0.81$).

To enhance contextual representativeness, schools were selected from two districts, one semi-urban and one predominantly rural. Within each district, one government-funded and one privately managed institution were included. Government schools were mainly used by students whose socioeconomic status was lower and lower-middle, but private schools were mostly utilized by middle-income families. This distribution allowed the analysis of the stress experiences in the socioeconomically heterogeneous but regionally constrained situation.

The stratified random sampling strategy remained adopted. The institutional approval was taken, and the student sample was picked in terms of the grade level, and the gender balance was kept equal. Inclusion criteria included normal school attendance and state board curriculum enrolment. Students who had been identified with severe psychiatric disorders or chronic medical problems in the past were excluded to reduce the possibility of few confounding factors on emotional well-being.

A large percentage of the respondents were first- or second-generation students, which can be identified by educational mobility tendencies in Bihar in general. Parental occupations were reported to be agriculture, small-scale business, or government service about 62 per cent., which is in line with occupational distribution of the state.

Power Analysis

The a priori power analysis was done before data collection using G*Power (Faul et al., 2009). Taking a medium effect size ($d = 0.50$), a important level of 0.05 and the wanted level of statistical power of 0.80 with two independent samples t-tests, then the minimally required sample size was estimated as 176 participants. The 200 sample was above this value, thus providing sufficient statistical power in the group comparison and moderation analysis based on the regression analyses.

Measures

Academic Stress

The academic stress was assessed in the form of perceived academic stress with the help of Academic Stress Scale created by Kohn and Frazer (1986). The tool is composed of 30 questions that measure anxiety about exams, workload pressure, parental demands, time pressures, and academic failure anxieties.

The responses remained rated using a 5-point Likert scale of 1(Strongly Disagree) to 5 (Strongly Agree). The possible total scores are between 30 and 150 with higher scores meaning the perceived academic stress.

Past studies have established acceptable psychometric value of the scale with a mean internal consistency coefficient of between .80 and .88. The reliability analysis in the existing sample produced a Cronbach alpha of .87, and this shows that there is a high internal consistency within the context of Bihar.

Emotional Well-Being

The Mental Health Continuum Short Form (MHC-SF; Keyes, 2002) was the method of measuring emotional well-being. The scale is a 14-item measure of positive mental health that comprises emotional, psychological, as well as social characteristics of health. In contrast to deficit-based instruments, the MHC-SF targets positive functioning and prosperity, as opposed to the reduction of symptoms.

The participants were asked to evaluate the frequency of certain experiences experienced in the last month using a 5-point scale (Never) to (Every day). An increase in aggregate scores depicts the presence of more emotional well-being.

The MHC-SF has proven to be very reliable among adolescents. Internal consistency was high in the present paper (Cronbachs $89 = .89$) and this indicates that it could be used in this regional sample.

Procedure

The collection of the data was done within the normal school hours with the approval of the administration and informed consent. Students took printed questionnaires separately in the classrooms with standardized instructions.

In order to maintain confidentiality and reduce peer pressure, the arrangement of the seating was spaced out, and the participants were asked not to discuss answers as they completed them. The mean duration of taking the instruments was about 35 minutes.

Students were clearly told that their participation was voluntary and that their answers would also be kept confidential. It was also explained that the research was in no way associated with academic grading or school assessment, which is also vital in the educational environment that is examination-driven in Bihar.

The filled questionnaires were picked up on the spot and anonymised. Statistical software was used to match data before analysis and to cross-check its accuracy.

Data Screening and Statistical Analysis Plan

Before hypothesis testing, preliminary data screening was conducted.

Missing Data

Incomplete answers were below 2 percent of all data points. Considering the fact that the proportion is low, mean substitution was used to maintain the size of the sample without introducing a significant bias.

Assumption Testing

Shapiro-Wilk tests, as well as values of skew and kurtosis, were used to evaluate the normality of distribution. The range of all the indices was within acceptable parameters (± 1.2), which favored parametric analyses.

The homogeneity of variance was assessed based on gender groups using Levene test.

Statistical Analyses

The means as well as standard deviations of the descriptive statistics were determined in relation to boys and girls. To evaluate gender differences:

- Independent samples t-tests were conducted.
- Effect sizes were computed using Cohen's d.
- Ninety-five percent confidence intervals were reported.

To examine associations:

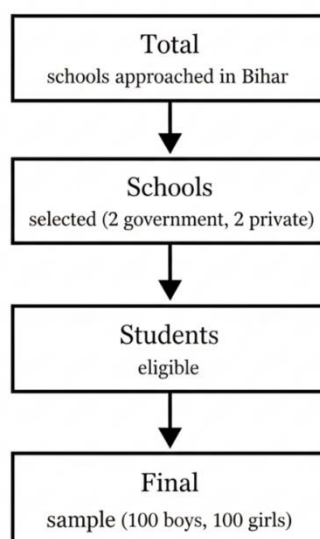
- Pearson's product-moment correlation coefficient (r) was calculated.
- Confidence intervals for correlation coefficients were estimated.

To test moderation:

- Hierarchical multiple regression analysis was performed.
- Predictor variables were mean-centered prior to constructing the interaction term.
- Academic Stress and Gender were entered in Step 1.
- The interaction term (Academic Stress $\times$ Gender) was entered in Step 2.
- Change in explained variance (ΔR^2) was examined.

All statistical tests were two-tailed, with the level of significance set at $\alpha = .05$.

Figure 2. Sampling Framework



Results

Preliminary Analyses

The data has been checked in terms of completeness and statistical conventions before the hypothesis testing. Lack of responses was quite low (under 2 per cent of all entries) and filled in by substituting with mean as detailed above.

Normality test also showed that both academic stress as well as emotional well-being remained normally distributed. The Shapiro-Wilk tests had a non-significant value ($p > .05$), skew and kurtosis values were not found to be out of the range -1.10 to +1.18 which is within the acceptable parameter analysis. The supposition of normality was also supported by visual analysis of histograms and Q-Q plots.

The equality of variances was not significant in both dependent variables and this suggests that the variance across gender groups is homogenous. In the regression model, the variance inflation factor (VIF) values were not more than 1.50, implying that the regression was not affected by multicollinearity.

Descriptive Statistics

The mean as well as standard deviations of academic stress along with emotional well being are given between boys and girls.

Boys mentioned an average score of 82.45 (SD = 10.21) on academic stresses, compared to 89.37 (SD = 11.04) of girls.

In contrast, boys demonstrated higher emotional well-being (M = 91.52, SD = 9.63) compared to girls (M = 86.18, SD = 10.27).

These patterns suggested potential gender-based differences, which were examined through inferential analyses.

Table 1: Descriptive Statistics for Academic Stress and Emotional Well-Being by Gender

Variable	Gender	N	M	SD
Academic Stress	Boys	100	82.45	10.21
Academic Stress	Girls	100	89.37	11.04
Emotional Well-Being	Boys	100	91.52	9.63
Emotional Well-Being	Girls	100	86.18	10.27

Gender Differences in Academic Stress

An independent samples t-test exposed a statistically important alteration in academic stress among boys and girls, $t(198) = 4.58, p < .001$.

Girls reported advanced levels of perceived academic stress than boys. The mean difference was 6.92, with a 95% confidence interval ranging from 3.94 to 9.90. The intended effect size (Cohen's $d = 0.66$) indicates a moderate magnitude of difference.

This finding supports Hypothesis 1 and suggests that female students in the sample experienced greater perceived academic pressure relative to their male counterparts.

Gender Differences in Emotional Well-Being

A second independent samples t-test examined gender alterations in emotional well-being. The difference was statistically important, $t(198) = 3.79, p < .001$.

Boys reported higher emotional well-being compared to girls. The mean difference was 5.34, with a 95% confidence interval of 2.56 to 8.12. The result size (Cohen's $d = 0.53$) also falls within the moderate range.

This result provides support for Hypothesis 2 and indicates that male students in the sample reported comparatively higher levels of positive emotional functioning.

Association Between Academic Stress and Emotional Well-Being

Pearson's product-moment correlation analysis was showed to inspect the association among academic stress as well as emotional well-being.

A strong negative correlation emerged, $r(198) = -.62, p < .001$.

The 95% confidence interval for the correlation coefficient ranged from $-.70$ to $-.52$. The strength and direction of this association indicate that higher levels of perceived academic stress were related with lower levels of emotional well-being.

The magnitude of this relationship suggests that academic stress accounts for a substantial proportion of variance in students' emotional functioning. This finding supports Hypothesis 3 and aligns with theoretical expectations derived from the stress-appraisal framework (Lazarus & Folkman, 1984).

Moderation Analysis: Does Gender Alter the Stress-Well-Being Relationship?

To determine whether gender moderated the association among academic stress as well as emotional well-being, hierarchical regression analysis was conducted.

Step 1: Main Effects Model

Academic stress and gender were entered as predictors of emotional well-being.

The model was statistically important, $F(2, 197) = 66.48, p < .001$, and accounted for 40% of the variance in emotional well-being ($R^2 = .40$).

Academic stress emerged as a strong negative predictor, $\beta = -.60, p < .001$.

Gender also significantly predicted emotional well-being, $\beta = .21, p = .002$.

These findings indicate that both perceived stress and gender contribute independently to variations in emotional well-being.

Step 2: Interaction Model

In the second step, the interaction term (Academic Stress $\times$ Gender) was introduced.

The interaction effect was not statistically significant, $\beta = -.07$, $p = .18$, with a change in explained variance of only 1% ($\Delta R^2 = .01$).

The addition of the interaction term did not meaningfully improve model fit. This indicates that the strength of the association among academic stress as well as emotional well-being did not differ significantly between boys and girls.

Table 2: Hierarchical Regression Predicting Emotional Well-Being

Predictor	β	T	P
Academic Stress	-.60	-10.82	< .001
Gender	.21	3.14	.002
Stress $\times$ Gender	-.07	-1.34	.18

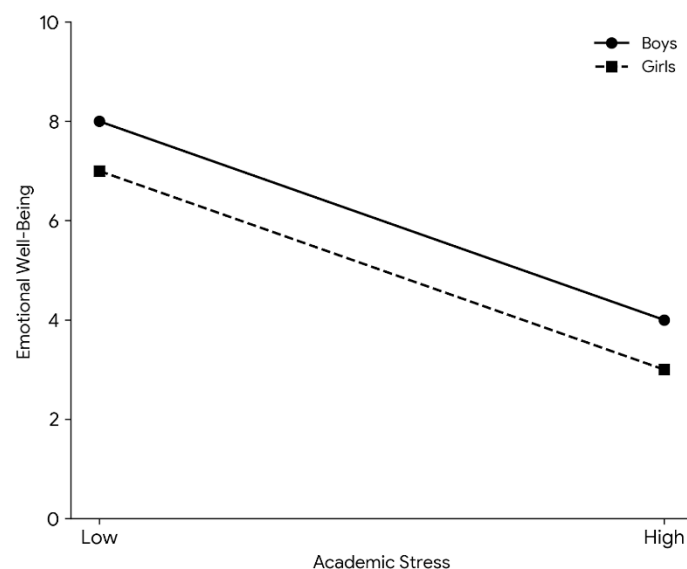
Interpretation of Moderation Findings

Although girls reported higher average stress and boys reported higher average well-being, the inverse association among academic stress as well as emotional well-being was statistically consistent across genders. In other words, increases in perceived academic stress were associated with comparable decreases in emotional well-being for both male and female students.

Thus, Hypothesis 4 was not supported.

These findings suggest that while gender differences exist in baseline levels of stress and well-being, the underlying psychological mechanism linking stress appraisal to emotional functioning appears structurally similar across genders within this sample.

Figure 3. Moderation Interaction Plot



Discussion

The present study sought to examine gender differences in academic stress and emotional well-being among secondary school students in Bihar and to determine whether gender alters the relationship between these constructs within the transactional stress, appraisal framework (Lazarus & Folkman, 1984). Three central findings emerged. First, girls stated meaningfully higher levels of academic stress than boys. Second, boys demonstrated comparatively higher emotional well-being. Third, academic stress was originate to have a strong undesirable relationship with emotional well-being and this relationship did not differ significantly by gender.

Combined, these results have context-specific illumination and theoretical elucidation.

Academic Stress in the Bihar Educational Context

The finding that girls had higher rates of academic stress is consistent with the trends of more extensive research studies about adolescents (Putwain, 2007; Herrmann and Koenig, 2019). Nonetheless, when it is applied to the context of the Bihar, this finding is interpreted in a more nuanced way.

The educational attainment in Bihar is being increasingly regarded as an instrument of social mobility. For most families, especially those with low income earnings, academic achievement is not just personal growth, but also a group dream. Examination performance in these families can represent a future security, family honour, and intergenerational development. In such a socio-cultural environment, academic performance obtains a greater emotional importance.

These expectations can have two meanings in the case of girls. The extension of access to education is a social change. Meanwhile, families who put a lot of resources in the schooling of their daughters might be particularly focused on performance, which could increase the stress appraisal activities. Girls might process academic expectations more profoundly, especially in places where it is perceived that success is both a chance and a task.

It is interesting to note that the effect size of gender difference in stress was not that large but medium. This implies that academic pressure has no connection with a single gender, but is an extensive part of the education setup. The disparity is one of degree, and not of exclusivity.

Emotional Well-Being and Gender Patterns

The fact that boys felt more emotionally well should be interpreted closely. Positive functioning was the conceptualization of emotional well-being in this study and included positive affect, psychological balance, and perceived competence (Keyes, 2002). It is not merely the lack of distress.

The question of cultural norms in terms of emotional expression can, to some extent, affect the self-report patterns. Most societies condition boys concerning the need to demonstrate a sense of strength and emotional regulation, which can influence their reaction to any well-being interventions. Girls, on the other hand, could have more emotional self-awareness or critical self-reflection and thus lower mean scores despite having equal coping capacity.

Simultaneously, the qualitative aspects of gendered academic expectations might be different. There are the long-term economic demands of boys to have government jobs, and the girls may be subjected to closer observation of the school results. Real-time appraisal can also be a factor in increased perceptions of stress and decreased reported emotional well-being.

Notably, girls with low levels of well-being do not always mean that they are vulnerable or dysfunctional. It can be a measure of an augmentation of cognitive-emotional investment in scholastic performance in a competitive system.

The Stress–Well-Being Relationship

One of the most theoretically important findings of the research could possibly be the strong negative correlation among academic stress as well as emotional well-being. Students who felt that their academic demands were high compared to the coping resources had low positive emotional functioning.

Such an outcome is quite in line with the transactional model of stress (Lazarus and Folkman, 1984). Emotional resources can be strained when academic expectations are perceived to jeopardize desired objectives, such as passing examinations or an opportunity in future. In the long-term, the persistent stress appraisal can lower the optimism, the ability to manage emotions, as well as the general life contentment.

The size of the correlation shows that academic stress is a significant percentage of the variation in emotional well-being. Practically, this implies that interventions aimed at altering stress appraisal processes, including cognitive reframing, training coping skills, and supportive teacher feedback, can significantly improve adolescent psychological functioning.

Understanding that Bihar is a highly exam-focused system of academia in which board examinations are frequently used as barriers to tertiary education and other employment opportunities, stress appraisal events might be especially relevant. Students who are working with limited resources, as well as competition-related expectations, face heightened cognitive assessment of academic challenge.

Moderation Analysis: A Theoretical Refinement

Although the gender differences were found in the average stress and well-being, the moderation test showed that gender did not have any important effect on changing the association among academic stress and emotional well-being. This observation deserves specific consideration.

The lack of moderation leads to the idea that beyond the point of escalation of academic stress, the effects on emotional well-being of boys and girls work in the same way. That is, girls can report greater stress on average, but the psychological process of stress appraisal to emotional effects is structurally similar in the male and female sexes.

This finding narrows down the understanding of gender differences in the study of adolescent stress. It suggests that differences in stress perception at the baseline may not be always associated with disparate vulnerability in the stress-well-being linkage. Interventionally, this result justifies the introduction of stress-management interventions with a broad focus as opposed to gender-specific interventions. Nonetheless, the nuances of gender in stress experience must be taken into consideration to design programs.

Rural–Urban and Institutional Reflections

Despite the fact that the given study did not provide actual comparisons of the rural and semi-urban schools, the broadness of the institutional settings gives contextual insight. Other stressors that can be experienced by students in

rural areas include insufficient academic infrastructure or difficulties in transport. On the other hand, semi-urban districts will have competitive climates through the interactions of the private institutions that increase the pressure associated with exams.

The current study could be expanded in future studies by a direct test of institutional type or geographical location as a moderating factor in the stress appraisal framework.

Educational and Policy Implications

The results support the need to incorporate the idea of psychological well-being in educational planning in Bihar. Strengthening academic aspirations means that mental health should be considered to go alongside structural reforms.

Schools can think of including stress-management structured modules in the secondary school curriculum, especially when examinations are ongoing. Some of the aspects that may be in the teacher training programs are identification of the indicators of academic distress and the message of balanced achievement, which is based on effort and growth and not ranking.

Due to the uniformity of the stress-well-being interaction between genders, a universal preventive intervention can be effective. However, gender-specific expectations and coping sensitivity are critical.

Broader Significance

The research is an addition to the studies on educational psychology in regions because it places stress-appraisal processes in a socio-educational context of Bihar that is undergoing change. A significant part of the literature is devoted to metropolitan populations; the state-level analysis is vital to the culturally responsive intervention design.

Academic stress is also to be understood not only as an educational issue but as a developmental and social health problem. The emotional health at an adolescent stage determines the future academic persistence, career paths, and resistance. Knowledge about how Bihari adolescents perceive academic demands offers an evidence foundation on how to incorporate mental health elevation in the educational policy..

Conclusion

The current study involved scholastic stress and emotional well-being among secondary school students in Bihar, as the transactional stress appraisal framework (Lazarus and Folkman, 1984). Placing analysis in the area where educational ambitions and competition based on examinations were on the increase, the research aimed at demystifying not only gender patterns but also structural connections between stress and psychological functioning.

A number of important insights were realized. Girl students were found to experience more academic stress and boys were found to have relatively high emotional well-being. These disparities indicate that the expectations of studies can be perceived and internalized differently in both genders in the socio-cultural setup of Bihar. Nevertheless, these differences were of a moderate magnitude, which means that academic pressure is a mass phenomenon, and it is not something that only women go through.

More importantly, academic stress presented a positive and important inverse association with emotional well-being. The students who were found to have the academic demands that were higher than their coping resources were also found to have reduced positive emotional functioning. This result supports the main assumption of the stress-appraisal model: psychological responses are determined not only by objective needs, according to which needs are cognitively assessed.

The moderation analysis provided one with another theoretical clarity. Even though gender was a predictor of different means of stress and well-being, it did not significantly modify the connection between the two. The process that connects the increased stress appraisal to emotional misery was matched between boys and girls. This implies that the effects of stress on emotional functioning have many similar psychological processes, although the baseline experiences of academic pressure may differ.

These results have a viable application to the educational system in Bihar. With the increasing enrolment rates and the escalating aspirations, the academic institutions will need to find a balance between performance requirements and psychological sustainability. Incorporating institutionalized stress-management interventions, enhanced school-based counseling services, and enrichment of adaptive coping responses might be used to offset the emotional costs of competitive school systems. On a larger scale, the research highlights the need to have contextually-oriented psychological studies. The education change in Bihar is both a challenge and an opportunity. Through analysis of the stress in its regional and cultural context, the work provides evidence that would be utilized in designing mentally responsive programs locally. Future studies can build upon this study by adopting longitudinal designs to study how stress appraisal changes with time, institutional or rural-urban variations more directly, and qualitative studies that may enhance the knowledge on what students might be experiencing with academic life.

Overall, the problem of adolescent academic stress in Bihar is not a mere consequence of educational aspiration but is one of the primary psychological aspects with significant consequences on the emotional health of students. It needs a concerted effort on the part of educators, policymakers, families, and even mental health professionals.



References

1. Deb, S., Strodl, E., & Sun, H. (2015). Academic stress, parental pressure, anxiety and mental health among Indian high school students. *International Journal of Psychology and Behavioral Sciences*, 5(1), 26–34.
2. Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41(4), 1149–1160.
3. Herrmann, K. J., & Koenig, J. (2019). Gender differences in stress and coping among adolescents: A meta-analytic review. *Journal of Adolescence*, 74, 1–12.
4. Keyes, C. L. M. (2002). The mental health continuum: From languishing to flourishing in life. *Journal of Health and Social Behavior*, 43(2), 207–222.
5. Kohn, J. P., & Frazer, G. H. (1986). An academic stress scale: Identification and rated importance of academic stressors. *Psychological Reports*, 59(2), 415–426.
6. Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer Publishing Company.
7. Pascoe, M. C., Hetrick, S. E., & Parker, A. G. (2020). The impact of stress on students in secondary school and higher education. *International Journal of Adolescence and Youth*, 25(1), 104–112.
8. Putwain, D. W. (2007). Test anxiety in UK schoolchildren: Prevalence and demographic patterns. *British Journal of Educational Psychology*, 77(3), 579–593.