

# Anxiety As A Determinant Of Academic Procrastination Among Senior Secondary School Students

Dr. Nivedeta<sup>1</sup>, Poonam Devi<sup>2</sup>

<sup>1</sup>Professor, Department of Education, C.D.L.U., Sirsa, Haryana, India.

<sup>2</sup>Research Scholar, Department of Education, C.D.L.U., Sirsa., Haryana, India.

## **Abstract:**

This study investigates anxiety as a determinant of academic procrastination among senior secondary school students. The method employed in this investigation was a descriptive survey. A sample of 600 senior secondary school students was chosen using a multi-stage random sampling technique. Academic procrastination was considered the dependent variable, while anxiety served as the independent variable. The Anxiety Scale by Sarkar and Das (2020) was utilized to gather data, while the Academic Procrastination scale was developed by the investigator. The results revealed a significant effect of anxiety on academic procrastination among senior secondary school students. Additionally, it was found that locality had a significant effect on academic procrastination among senior secondary school students. Furthermore, a double interaction effect of anxiety and locality on academic procrastination among senior secondary school students was also found to be significant.

**Keywords:** Anxiety, Academic Procrastination, Senior Secondary School Students.

## **INTRODUCTION:**

Modern life is laden with responsibilities, each accompanied by deadlines and time constraints for completion. Amidst periods of heightened stress and multitasking, it is commonplace to defer certain activities for later. Procrastination, therefore, refers to the habit of postponing responsibilities until a later time. The Oxford English Dictionary defines procrastination as "the action or habit of

postponing or putting something off." However, procrastination cannot be simply defined as intentionally delaying the completion of a task, as individuals possess differing perceptions regarding delay (Van Eerde, 2003).

Procrastination entails delaying tasks that one ought to do, typically because of a lack of desire to do them. Various expressions, such as "putting off" or "shelving," are synonymous with procrastination. Broadly, procrastination can be defined as the act of delaying work as a means to escape from uninteresting tasks for either a short or long period, or to avoid them entirely for a short or long term. Procrastination can be categorised into two types:

**1) Purposely Delaying:** This occurs when an individual experiences subjective discomfort with a particular task or topic, leading them to continually postpone its completion. Common justifications for this behaviour include beliefs of having ample time or intending to tackle the task later.

**2) Voluntarily Delaying:** This form of procrastination involves intentionally delaying work despite being aware of the potential negative consequences. It signifies that individuals are cognizant that delaying is not beneficial, yet they still choose to do so due to various circumstances. Purposely delaying may sometimes not be detrimental, particularly when individuals are aware of their responsibilities and have numerous other tasks to complete before addressing the delayed work, even if the delayed task is less important than others. In such cases, it may cause less harm.

### **Concept of Academic Procrastination**

Among the various types of procrastination, academic procrastination stands out as a prevalent behavioural tendency wherein individuals evade commencing or completing necessary academic tasks, even when the delay could result in unfavourable outcomes (Cho M, Lee Y-S. 2022). Academic procrastination, characterised as a domain-specific behaviour, refers to students' inclination to postpone completing academic tasks, such as studying for exams, doing homework, or writing essays, despite their awareness of the need to perform these tasks within specific deadlines.

Academic procrastination, often manifesting as the postponement of primary academic duties such as preparing for daily lessons,

revising for exams, or engaging in project work and co-curricular activities, reflects a habitual delay in fulfilling academic responsibilities (Haycock, McCarthy, & Skay, 1998). This behavioural pattern encompasses both the delay in completing assignments and the subsequent challenges arising from such delays (Beck, Koons, & Milgrim, 2000). Notably, such behaviours are notably prevalent among high school graduates transitioning into university life (Kachgal, Hansen, & Nutter, 2001; Lee, 2005).

Academic procrastination appears to be particularly rampant in academic environments where students habitually postpone tasks without valid justifications, often submitting assignments at the eleventh hour before deadlines. Research indicates that 30-40% of students perceive procrastination as a significant impediment to their personal and functional balance, especially among elementary school children who habitually delay completing numerous assignments until the last minute, resulting in elevated stress levels and potentially detrimental effects on their academic performance and psychological well-being.

Procrastination is a widespread behavioural trait in contemporary societies, characterised by a tendency to postpone essential tasks required to achieve goals (Ferrari et al., 1995; Callaghan & Newbegin, 2005). Although lacking a singular accepted definition, procrastination can be broadly conceptualised as a disposition to delay and thereby avoid performing tasks or making decisions. Within academic contexts, procrastination often manifests concerning tasks such as writing term papers, preparing for exams, and completing homework assignments (Solomon and Rothblum, 1984). Academic procrastination is known to detrimentally impact academic performance due to its association with adverse behaviours such as poor study habits, last-minute cramming for exams, test anxiety, late submission of assignments and papers, lower grades, and feelings of guilt and depression (Lee, 2005; Ferrari, 2009).

Anxiety emerges as a significant educational concern among students globally, characterised by emotional stress reactions preceding and persisting throughout examination periods (Yazıcı, K., 2017; Ashrafi-Rizi et al., 2014). The American Psychological Association (APA) defines depression symptoms as extreme sadness or despair lasting over two weeks, while anxiety is described as an apprehensive uneasiness of mind, typically concerning anticipated or impending events (Merriam-Webster, 2012).

### **Need of the Study**

Over the past three decades, considerable attention has been devoted to exploring the relationship between anxiety and procrastination. From a psychological standpoint, various behavioural, emotional, and cognitive factors may contribute to the development of procrastination in individuals. These encompass a range of elements, including fear of failure, low self-esteem, self-regulation, neuroticism, and difficulties in independent decision-making (Zarrin et al., 2020; Bäumle et al., 2021). Procrastination may also serve as a subconscious defensive mechanism when individuals perceive a task as threatening (Saplavska & Jerkunkova, 2018). Some studies have delved into the role of anxiety in individual differences in procrastination, suggesting that procrastination may heighten unpleasant feelings such as stress and anxiety. Rahardjo et al. (2013) found that individuals with higher anxiety levels tend to procrastinate more. Academic procrastination is detrimental to students' well-being and has been linked to poor academic performance (Kim & Seo, 2015), emotional distress (Huntley et al., 2019; Amani et al., 2021; Sirois, 2013), and anxiety. Anxiety is considered another potential contributing factor to academic procrastination. Drawing from Freudian psychoanalysis, procrastination is viewed as a manifestation of anxiety, with anxiety representing repressed unconscious desires of the self (Ferrari et al., 1995). According to this perspective, tasks are avoided because they pose a threat to the ego. Research indicates that anxiety, particularly the fear of failing an examination, can lead to academic procrastination as individuals seek to alleviate their anxiety (Vahedi, 2011). Moreover, academic stress and anxiety have been positively associated with procrastination.

Despite numerous research studies worldwide, the findings present a mixed picture. However, it is evident from the literature that procrastination has negative implications in educational settings (Keller, 1968; Semb et al., 1979), yet only a limited number of studies have been conducted within the Indian context. In light of this gap, the present study aims to investigate the relationship between anxiety and academic procrastination among Indian students.

### **VARIABLES USED**

#### **1. Dependent Variable**

1. Academic Procrastination
2. **Independent Variables**
  1. Anxiety (High & Low)
  2. Locality (Rural & Urban)

#### **OBJECTIVES OF THE STUDY**

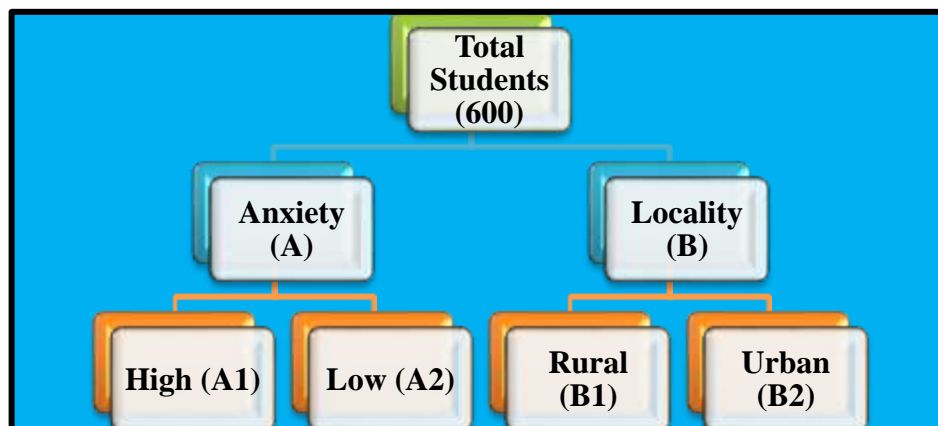
1. To investigate the main effect of Anxiety (A) on academic procrastination among senior secondary school students.
2. To examine the main effect of Locality (B) on academic procrastination among senior secondary school students.
3. To explore the double interaction effect of Anxiety and Locality (AxB) on academic procrastination among senior secondary school students.

#### **HYPOTHESES OF THE STUDY**

- H<sub>01</sub>** "There is no significant main effect of Anxiety (A) on academic procrastination among senior secondary school students."  
**H<sub>02</sub>** "There is no significant main effect of Locality (B) on academic procrastination among senior secondary school students."  
**H<sub>03</sub>** "There is no significant double interaction effect of Anxiety and Locality (AxB) on academic procrastination among senior secondary school students."

#### **RESEARCH METHODOLOGY AND DESIGN**

For the current investigation "Descriptive Survey Method" was used. The 2x2 factorial randomized group design was used to analyze the data. The independent variables i.e. Anxiety (High & Low) and Locality (Rural & Urban) were varied at the two levels as given below".



**POPULATION**

In the present study, all the 11<sup>th</sup> class students studying in private senior secondary schools, affiliated to Central Board of School Education (CBSE) of Haryana State constituted the target population.

**SAMPLE**

“Multi-stage random sampling technique” was employed to select a sample of 600 (male & female) sr. sec. school students from Rohtak and Jhajjar Districts.

**T**

**TOOLS USED**

1. **Anxiety Scale** by Sarkar and Das (2020).
2. **Academic Procrastination Scale** developed by the investigator herself.

**STATISTICAL TECHNIQUES**

“Mean, SD, t-test & Two way ANOVA were employed to examine the main & interaction effect.

**DATA ANALYSIS AND INTERPRETATION**

“In order to analyse the data, the 2-Way ANOVA with 2x2 factorial design was considered. It was decided that the null hypotheses will be rejected or retained at 0.01 and 0.05 level of significance. In order to confirm the objectives & to check the null hypotheses, the current investigation has been analyzed shown below”.

**Table-1 “Summary of 2 Way ANOVA (2x2 Factorial Design) for Academic Procrastination of Sr. Sec. School Students with respect to their Anxiety & Locality”**

Dependent Variable: Academic Procrastination					
Source of Variance	Type III Sum of Squares	df	Mean Squares	F-ratios	Sig.
Corrected Model	127211.240	7	18173.034	13.660	.000
Intercept	3182897.548	1	3182897.548	2392.481	.000
<b>Main Effect</b>					
Anxiety (A)	16725.617	1	16725.617	13.485**	.000
Locality (B)	13708.462	1	13708.462	9.794*	.002
<b>Double Interaction Effect</b>					

<b>Interaction effect of Anxiety x Locality (AxD)</b>	15863.978	1	15863.978	11.924**	.000
<b>Between Cells</b>	521507.0372	392	1330.375		
<b>Within Cells</b>	648718.277	399	.....		
<b>Total</b>		400			

\*\* Significant at 0.01 level

\*

Significant at 0.05 level

**Objective 1: To study the effect of Anxiety (A) on Academic Procrastination among senior secondary school students.**

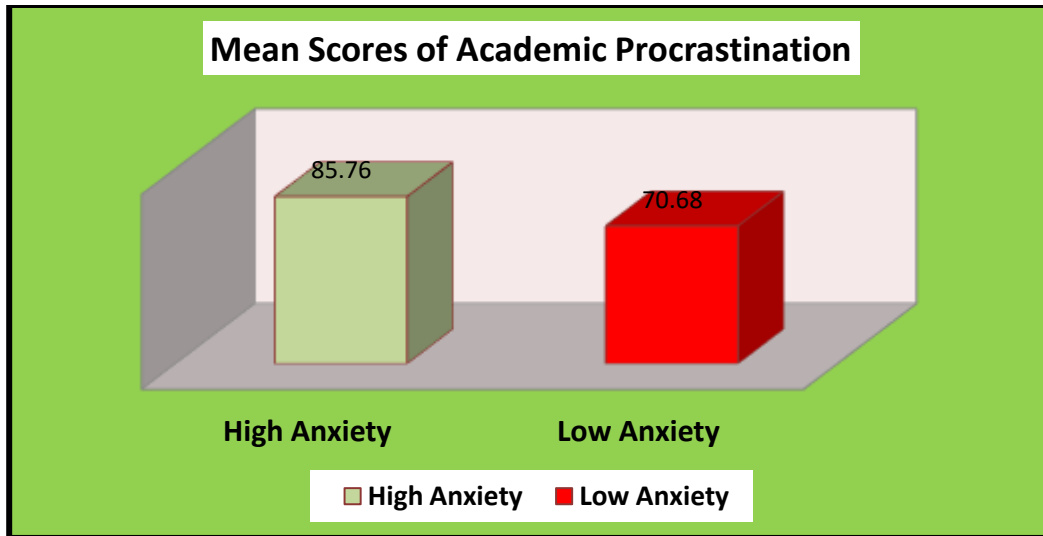
For the purpose of studying the effect of Anxiety on Academic Procrastination among senior secondary school students, the following null hypothesis was formulated:

**H<sub>01</sub>** There is no significant effect of Anxiety (A) on Academic Procrastination among senior secondary school students.

An inspection of Table-1 indicates that F-ratio for anxiety is (13.485) found significant at 0.01 level. Therefore, the null hypothesis **H<sub>01</sub>** "There is no significant effect of Anxiety on Academic Procrastination among senior secondary school students" stands rejected. Thus, it can be concluded that anxiety has a significant effect on academic procrastination among senior secondary school students. In order to investigate further the 't'-value was computed and has been given in Table-2.

**Table-2 't'-value for the Mean Scores of Academic Procrastination among Senior Secondary School Students with respect to Anxiety**

Groups	N	Mean	SD	't' value	Level of Significance
High Anxiety	199	85.76	39.06	4.13	Significant at 0.01
Low Anxiety	201	70.68	33.75		



**Fig. 1: Mean Academic Procrastination Scores of Senior Secondary School Students with respect to Anxiety**

The findings from Table-2 and Figure 1 reveal that the t-value (4.13) for the mean scores of academic procrastination among senior secondary school students with high and low anxiety levels is statistically significant at the 0.01 level. The mean scores indicate that students with high anxiety ( $85.76 \pm 39.06$ ) exhibit higher levels of academic procrastination compared to students with low anxiety ( $70.68 \pm 33.75$ ). Therefore, it can be inferred that students experiencing higher levels of anxiety tend to demonstrate greater procrastination tendencies towards their academic responsibilities.

**Objective 2: To study the effect of Locality (B) on Academic Procrastination among senior secondary school students.**

For the investigation into the effect of Locality (B) on Academic Procrastination among senior secondary school students, the null hypothesis was formulated as follows:

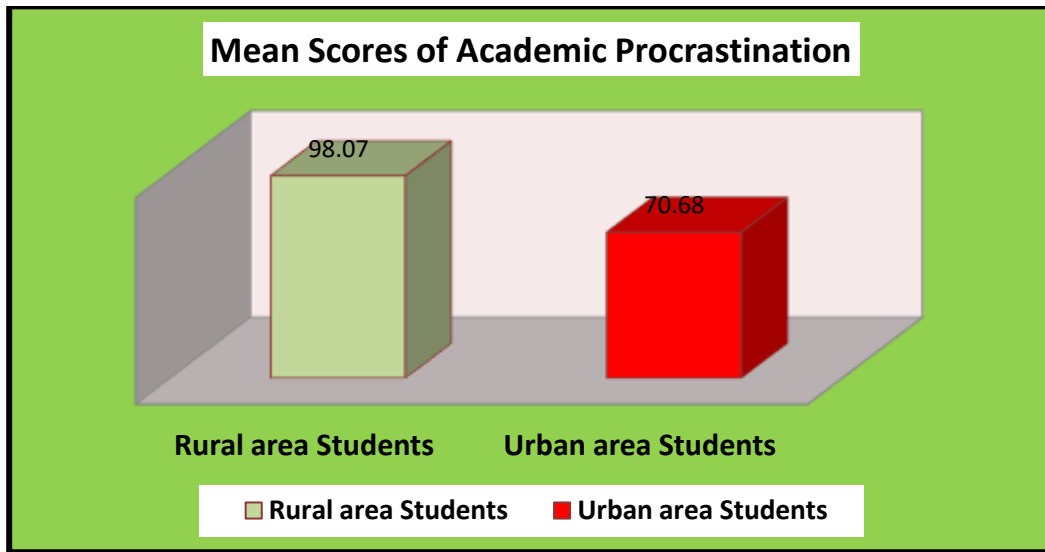
**H<sub>02</sub>:** There is no significant effect of Locality (B) on Academic Procrastination among senior secondary school students.

Table 1 indicates that the F-ratio for anxiety is (9.794), which is found to be significant at the 0.05 level. Consequently, the null hypothesis **H<sub>02</sub>** "There is no significant effect of Locality (B) on Academic Procrastination among senior secondary school students" is rejected. Thus, it can be inferred that locality indeed has a significant effect on academic procrastination among senior secondary school students. To delve deeper into this effect, the 't'-value was computed and is presented in Table-3.



**Table-3 ‘t’-value for the Mean Scores of Academic Procrastination among Senior Secondary School Students with respect to Locality**

Groups	N	Mean	SD	‘t’ value	Level of Significance
Rural area Students	198	98.07	40.26	3.55	Significant at 0.01
Urban area Students	202	83.78	40.27		



**Fig. 2: Mean Academic Procrastination Scores of Senior Secondary School Students with respect to Locality**

It can be observed from table-3 and fig. 2 that the t-value (3.55) for the mean scores of academic procrastination of senior secondary school students belonging to rural and urban area is found significant at 0.01 level. Means scores concluded that students belonging to rural area (98.07±40.26) done more academic procrastination as compared to students belonging to urban area (83.78±40.27). So, it can be concluded that rural area students engaged in more academic procrastination activities than urban area students.

**Objective 3: To study the interaction effect of Anxiety and Locality (AxB) on Academic Procrastination among senior secondary school students.**

For the examination of the effect of Anxiety and Locality on Academic Procrastination among senior secondary school students, the following null hypothesis was proposed:

**H<sub>03</sub>:** There is no significant interaction effect of Anxiety and Locality (AxB) on Academic Procrastination among senior secondary school students.

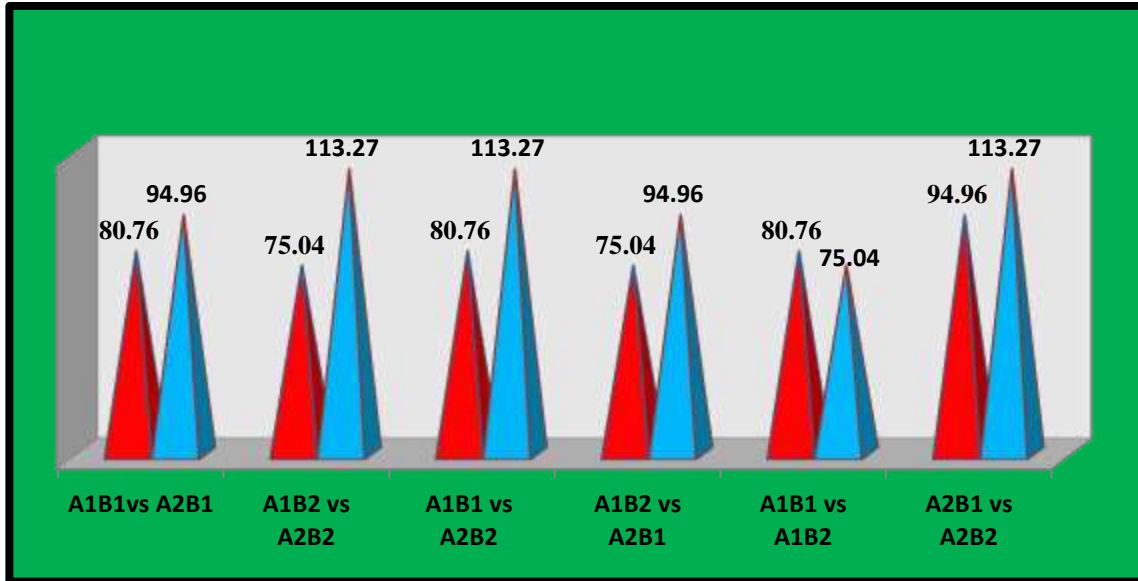
An analysis of Table-1 reveals that the F-ratio (11.924) for the interaction effect of anxiety and locality on academic procrastination among students is significant at the 0.01 level. Therefore, the null hypothesis **H<sub>03</sub>:** "There is no significant interaction effect of anxiety and locality on Academic Procrastination among senior secondary school students" is rejected. Consequently, it can be concluded that there exists a significant interaction effect of anxiety and locality on academic procrastination among senior secondary school students.

For further investigation, t-test was employed to ascertain the significant difference between mean scores of academic procrastination for different groups. The results are presented in Table 4 and Fig. 3.

**Table-4 't' values for Mean Scores of Academic Procrastination among Senior Secondary School Students for Different groups of Anxiety x Locality (A x D)**

Groups	N		Means		SDs		t-values
A <sub>1</sub> B <sub>1</sub> vs A <sub>2</sub> B <sub>1</sub>	96	102	80.76	94.96	37.70	41.56	2.52*
A <sub>1</sub> B <sub>2</sub> vs A <sub>2</sub> B <sub>2</sub>	103	99	75.04	113.27	31.99	38.83	7.63**
A <sub>1</sub> B <sub>1</sub> vs A <sub>2</sub> B <sub>2</sub>	96	99	80.76	113.27	37.70	38.83	5.93**
A <sub>1</sub> B <sub>2</sub> vs A <sub>2</sub> B <sub>1</sub>	103	102	75.04	94.96	31.99	41.56	3.84**
A <sub>1</sub> B <sub>1</sub> vs A <sub>1</sub> B <sub>2</sub>	96	103	80.76	75.04	37.70	31.99	1.15 (NS)
A <sub>2</sub> B <sub>1</sub> vs A <sub>2</sub> B <sub>2</sub>	102	99	94.96	113.27	41.56	38.83	3.22**

\*\* Significant at 0.01 level    \* Significant at 0.05 level    NS = Not Significant



**Fig. 4: Mean Scores for Interaction Effect of Anxiety & Locality (Ax B) on Academic Procrastination among Senior Secondary School Students**

An examination of Table-4 reveals several significant findings regarding the relationship between anxiety, locality, and academic procrastination among senior secondary school students.

Firstly, the t-value (2.52) for rural students with high anxiety (A1B1) compared to rural students with low anxiety (A2B1) is significant at the 0.05 level. It is observed that rural students with high anxiety (80.76) exhibit lower levels of academic procrastination than rural students with low anxiety (94.96).

Secondly, the t-value (7.63) for urban students with high anxiety (A1B2) compared to urban students with low anxiety (A2B2) is significant at the 0.01 level. Urban students with high anxiety (75.04) demonstrate lower academic procrastination than urban students with low anxiety (113.27).

Thirdly, the t-value (5.93) for rural students with high anxiety (A1B1) compared to urban students with low anxiety (A2B2) is significant at the 0.01 level. Rural students with high anxiety (80.76) display lower academic procrastination than urban students with low anxiety (113.27).

Moreover, the t-value (3.84) for urban students with high anxiety (A1B2) compared to rural students with low anxiety (A2B1) is significant at the 0.01 level. Urban students with high anxiety (75.04) demonstrate lower academic procrastination than rural students with low anxiety (94.96).

However, the t-value (1.15) for rural students with high anxiety (A1B1) compared to urban students with high anxiety (A1B2) is not significant at the 0.05 level, suggesting no significant difference in academic procrastination between these groups.

Lastly, the t-value (3.22) for rural students with low anxiety (A2B1) compared to urban students with low anxiety (A2B2) is significant at the 0.01 level. Rural students with low anxiety (94.96) exhibit lower academic procrastination than urban students with low anxiety (113.27).

These findings highlight the complex interplay between anxiety, locality, and academic procrastination among senior secondary school students, underscoring the need for further research in this area.

### **Findings of the Study**

1. There was a significant effect of Anxiety on Academic Procrastination among senior secondary school students. This implied that higher levels of anxiety are associated with increased academic procrastination tendencies among students.
2. Locality had a significant effect on Academic Procrastination among senior secondary school students. This suggested that the geographical location, whether rural or urban, influences the extent of academic procrastination exhibited by students.
3. A significant interaction effect of anxiety and locality on Academic Procrastination among senior secondary school students was observed. This indicated that the combined influence of anxiety and locality amplifies or mitigates academic procrastination tendencies among students, depending on their geographical context and anxiety levels.

### **Discussion**

The current investigation has concluded that students experiencing higher levels of anxiety tend to exhibit higher levels of procrastination towards their academic responsibilities. This finding is consistent with previous research by Cassidy and Johnson (2002), who similarly reported that students with high levels of anxiety are more prone to procrastination than their counterparts. Consequently, to mitigate anxiety levels and enhance the quality of education, it is recommended to organize

workshops aimed at reducing students' anxiety and academic procrastination.

Additionally, the study found that students residing in rural areas engage in more academic procrastination activities compared to their urban counterparts. This finding aligns with the results obtained by Kumari and Reddy (2021), who also identified a significant impact of locality on academic procrastination among students.

Overall, these findings highlight the importance of addressing both anxiety levels and geographical location in efforts to reduce academic procrastination and enhance educational outcomes among students. Implementing targeted interventions and support mechanisms tailored to address these factors can contribute to fostering a conducive learning environment and promoting academic success.

## REFERENCES

- Amani H., Habibi-Kaleybar R., Farid A., Sheykhali-zadeh S. Meta-Analysis of the Effectiveness of Interventions on test anxiety reduction. *Psychol. Res.* 2021;45:56.
- Ashrafi-Rizi H, Sajad MS, Rahmani S, Bahrami S, Papi A. The effective factors on library anxiety of students in Isfahan University of Medical Sciences and Shiraz University of Medical Sciences. *J Educ Health Promot.* 2014;3:92
- Bäulke L, Daumiller M, Dresel M. How conscientiousness and neuroticism affect academic procrastination. *Z Entwicklungspsychol Padagog Psychol.* 2021.
- Cassady JC, Johnson RE. (2002). Cognitive test anxiety and academic performance. *Contemp Educ Psychol.* 2002;27:270–95.
- Cho M, Lee Y-S. (2022). The effects of medical students' self-oriented perfectionism on academic procrastination: the mediating effect of fear of failure. *Korean J Med Educ.*, 34:121–9.
- Ferrari JR, Johnson JL, McCown WG. (1995). Procrastination research. *Procrastination task Avoid.* 21–46.
- Huntley C.D., Young B., Temple J., Longworth M., Smith C.T., Jha V., Fisher P.L. (2019). The Efficacy of Interventions for Test-Anxious University Students: A Meta-Analysis of Randomized Controlled Trials. *J. Anxiety Disord.*, 63:36–50.  
doi: 10.1016/j.janxdis.2019.01.007.
- Kumar, V. and Reddy, B.S. (2021). Rural areas students are more academic procrastination than urban areas students. *Indian Journal of Applied Research*, 11(1).

- Kim K.R., Seo E.H. (2015). The Relationship between Procrastination and Academic Performance: A Meta-Analysis. *Personal. Individ. Differ.* 82:26–33. doi: 10.1016/j.paid.2015.02.038.
- Rahardjo W, Juneman J, Setiani Y. (2013). Computer anxiety, academic stress, and academic procrastination on college students. *J Educ Learning (EduLearn)*, 7:147–52
- Saplavska J, Jerkunkova A. Academic procrastination and anxiety among students. In: *Engineering for rural development-International Scientific Conference, 2018*. 2018. p. 1192–7.
- Sirois F.M. (2013). Procrastination and Stress: Exploring the Role of Self-Compassion. *Self Identity*. 13:128–145. doi: 10.1080/15298868.2013.763404.
- Sirois F.M., Pychyl T.A. (2016). *Procrastination, Health, and Well-Being*. Academic Press; Cambridge, MA, USA: 2016.
- Vahedi S. (2011). Canonical correlation analysis of procrastination, learning strategies and statistics anxiety among Iranian female college students. *Procedia Soc Behav Sci.*, 30:1620–4.
- Yazıcı K. (2017). The relationship between learning style, test anxiety and academic achievement. *Univ J Educ Res.*, 5:61–71.
- Zarrin SA, Gracia E, Paixão MP. (2020). Prediction of academic procrastination by fear of failure and self-regulation. *Educ Sci Theory Pract.* 20:34–43.