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Research Paper

Does Flexible Thinking Predict Student Well-being? A Study on Cognitive Flexibility and Psychological Distress

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ABSTRACT

In today's fast-changing world, students need the ability to shift perspectives and adapt, which is vital for handling academic and emotional challenges. This study examined the role of cognitive flexibility in student well-being by exploring its link with psychological distress among 150 university students (ages 19–28) from Aligarh Muslim University. Data were collected using the Cognitive Flexibility Inventory (CFI) and Kessler Psychological Distress Scale (K10). Analyses (correlation, regression, t-test, ANOVA) revealed a significant negative correlation (r = –.523) between cognitive flexibility and psychological distress. Cognitive flexibility explained about 27.4% of the variance in distress, with differences across demographics. Findings suggest that fostering cognitive flexibility can reduce stress and promote psychological well-being.

Keywords: *Cognitive Flexibility, Psychological Distress, Students, Wellbeing, Stress, Mental Health*

Deteriorating mental health of students in higher education is an increasingly recognized global concern (Campbell et al., 2022). Though the university offers a vast opportunity for personal and academic growth, it is also marked by serious psychological challenges. It is an important point in life where major shifts happen, moving from adolescence to adulthood, academic demands, personal life issues, and anticipation of the future collectively contribute to increasing stress, which can result in psychological distress if not managed effectively. This condition includes a range of symptoms such as depression, anxiety, feelings of isolation and stress which will impact students' ability to function effectively and flourish in their academic environment (American College Health Association, 2021).

Recent mental health surveys have highlighted alarming trends, showing that a considerable proportion of university students experience moderate to high levels of psychological distress. Findings in the earlier research have also shown that elevated levels of psychological distress are more prevalent among higher education students as compared to the general population. Gilavand, Khoshouie, and Mohamadpour (2023) found in their study that around 45% of university students reported acute mental distress in the United States.

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Similarly, many findings of the research have shown that depression and anxiety are on the rise in college students (Hunt et al., 2018; Auerbach et al., 2018).

Psychological distress negatively affects cognitive function and concentration, which further makes life in university a lot difficult (Gibbons et al., 2020; Asfaw et al., 2020), thereby creating an ongoing struggle between stress and acute deficiency. This growing concern underscores the need to identify psychological resources and coping mechanisms that can buffer against the adverse effects of stress. Cognitive flexibility is one of such psychological resource that has garnered increasing attention in the recent times.

Cognitive flexibility is the mental capacity to shift perspectives, adapt to changing demands, and think about problems in multiple ways. It is an essential part of executive functioning and plays a crucial part in emotion regulation, problem-solving, and adaptive coping (Dennis & Vander Wal, 2010). Individuals with high cognitive flexibility are often better equipped to reinterpret stressors, generate alternative strategies, and regulate their emotional responses effectively, which may buffer them against psychological difficulties (Martin & Rubin, 1995).

Emerging research (Gabrys et al., 2018; Canas et al., 2003) suggests that cognitive flexibility may serve as a psychological resource that reduces vulnerability to psychological distress, which includes symptoms such as emotional exhaustion, depression and anxiety.

With the increasing amount of psychological distress in Indian higher education settings and the emphasis on student mental health, it becomes essential to analyze internal psychological resources such as cognitive flexibility. Understanding whether flexible thinking can predict psychological distress in this population can provide valuable insights for the development of mental health interventions, stress management training, and campus-based support systems.

Therefore, this study aims to examine the predictive role of cognitive flexibility in determining levels of psychological distress among university students. By exploring this relationship, the study seeks to contribute to the existing literature and offer practical implications for enhancing student well-being.

Cognitive Flexibility

According to Scott (1962), cognitive flexibility refers to the mental ability to shift one's thinking between different concepts depending on situational context. The researcher added that when encountering stressful life situations this ability allows individuals to think adaptively, and is an essential skill that encourages individuals to avoid becoming rigid in maladaptive thinking patterns. The definition of cognitive flexibility highlights the importance of evaluating all possible options before arriving to the best alternative.

This capacity to shift perspectives, reframe problems, and integrate diverse pieces of information is fundamental to navigating the complexities of modern life, particularly in dynamic environments such as higher education. In the context of university students, cognitive flexibility is increasingly recognized as a crucial determinant of academic success, personal well-being, and effective social interactions.

Psychological Distress

APA describes psychological distress as a collection of painful physical and mental symptoms which are commonly linked with normal change in mood experienced by many individuals. Psychological distress in many cases might signal the onset of anxiety disorder, depressive disorder, and many other clinical conditions (Ridner, 2004). It has also been associated with adverse health outcomes, cognitive decline and mortality (Zhu et al., 2022; Ridner, 2004). Many self-report instruments designed for depression and anxiety are thought to assess it.

Ridner (2004) define psychological distress as "the unique discomforting, emotional state experienced by an individual in response to a specific stressor or demand that results in harm, either temporary or permanent, to the person".

Purpose of the Study

There is considerable research on the prevalence of psychological distress among students and factors associated with it. However, it mainly ignores the cognitive aspects, which are an important part of a person's life and are responsible for their thinking and other mental processes. Most research has dwelt on these variables separately or as mediators, and only a few studies have been done on the direct relationship between these two variables. Hence, there is a pressing need for a deeper understanding of this relationship, as it can help improve students' lives, particularly in a fast-paced, high-tech world where they must keep up with constant changes while managing various aspects of their lives. Understanding the role of flexible thinking is especially relevant in today's academic climate, where students face multiple stressors. If cognitive flexibility is found to be a significant predictor of psychological distress, it could serve as an important target for mental health interventions, enabling practitioners to shift the focus from merely treating symptoms to strengthening internal resilience.

Additionally, while much research has concentrated on external stressors and symptoms, less attention has been paid to internal cognitive traits that might help buffer against mental health issues and emotional difficulties. This study addresses that gap by examining cognitive flexibility as a potential predictor of psychological distress. Ultimately, this research highlights the importance of developing students' cognitive adaptability for academic achievements and to promote long-term emotional well-being. Therefore, this study seeks to explore cognitive flexibility as a predictor of psychological distress among university students.

Objectives

- To assess the prevalence level of psychological distress among university students.
- To examine the mean difference in cognitive flexibility and psychological distress based on gender among university students.
- To examine the mean difference in cognitive flexibility and psychological distress based on area of residence (urban vs. rural) among university students.
- To examine the mean difference in cognitive flexibility and psychological distress based on socioeconomic status among university students.
- To examine the relationship between cognitive flexibility and psychological distress among university students.
- To explore cognitive flexibility as a predictor of psychological distress among university students.

Hypotheses

- *HA1:* There will be a significant level of psychological distress prevalent among university students.
- *HA2:* There will be a significant mean difference between males and females in cognitive flexibility and psychological distress among university students.
- *HA3:* There will be a significant mean difference in cognitive flexibility and psychological distress between university students from urban and rural areas.
- *HA4:* There will be a significant difference in cognitive flexibility and psychological distress among university students based on their socioeconomic status.
- *HA5:* There will be a significant negative relationship between cognitive flexibility and psychological distress among university students.
- *HA6:* Cognitive flexibility will emerge as a significant predictor of psychological distress among university students.

METHODOLOGY

Participants:

The study was conducted with a sample of 150 university students, out of which 82 were men and 68 were women. Convenience sampling technique was used to choose the participants from Aligarh Muslim University, Aligarh. The sample's age ranged from 18 to 29 years old.

Inclusion Criteria

- Age should be above 18 years.
- The person must be proficient in English Language.
- Willing to participate in the study.
- No pre-existing medical condition or mental health disorder

Exclusion Criteria

- Below 18 years students are not included in the study.
- Illiterate people are excluded.
- Participants with incomplete responses are excluded.

Tools Used

The following tools were used to collect data from the samples.

1. **Personal data sheet:** This included self-prepared questions for gathering information on sociodemographic characteristics, namely, gender, area of residence, and socioeconomic status. Gender was categorized as male or female. The area of residence was divided into urban and rural categories. Socioeconomic status was classified into three groups: upper class, middle class, and lower class.
2. **Kessler Psychological Distress Scale (K10):** The Kessler Psychological Distress Scale was developed by Ronald C. Kessler in 1992. K-10 is designed to measure psychological distress, referred to as a "discomforting, emotional state experienced by an individual in response to a specific stressor or demand that results in harm, either temporary or permanent, to the person." This self-report questionnaire consists of 10 items, which are scored on a 5-point Likert scale. Respondents rate how often they experienced each symptom on a scale from 1' none of the time' to 5 'all of the time'. The scores for every item are then summed to give a total score ranging from 10 to 50. Higher scores indicate greater levels of psychological distress. The internal consistency for the Kessler Psychological Distress (K10) scale was α=0.844. In the

current sample, the internal consistency of the Kessler psychological distress scale was found to be .893.

3. **Cognitive Flexibility Inventory (CFI):** The Cognitive Flexibility Inventory (CFI) was created by Dennis and Vander Wal in 2010. It is a 20-item self-report scale with a 7-point Likert-type scale ranging from 1 'strongly disagree' to 7 'strongly agree.' CFI measures cognitive flexibility by looking into the factors of cognitive flexibility responsible for adaptive thinking amidst stressful encounters. It contains two subscales: the Control subscale, which assesses the perception of control over situations, and the Alternative subscale, which assesses the ability to recognize alternative options in challenging situations. An overall score is found by adding the scores of every item. Higher scores of individuals show a greater degree of cognitive flexibility. The total internal consistency of the Cognitive Flexibility Inventory was found to be $\alpha = .90$, while the internal consistency in the current sample was $\alpha = .828$.

Procedure:

This research used the descriptive cross-sectional research design method. Participants who were willing to participate in this study provided their informed consent. After obtaining consent, each identified participant was handed a questionnaire. They were briefed on the study's objectives and assured that their anonymity and confidentiality would be safeguarded. Participants who chose not to participate were permitted to withdraw at any time. Once they completed the surveys, the researcher expressed gratitude for their cooperation and time. Both the scales were scored according to the guidelines provided in the respective manuals. Descriptive statistics, ANOVA, t-tests, Pearson's correlation coefficient, and simple linear regression were employed for the analysis of the data using SPSS version 27.

Statistical Analysis

SPSS version 27 was used to perform various statistical analyses on the data collected from university students. Descriptive statistics were computed to summarize the participants' scores on cognitive flexibility and psychological distress.

To examine group differences:

- To compare cognitive flexibility and psychological distress scores based on gender and area of residence an independent sample t test was used.
- To see the differences in scores of cognitive flexibility and psychological distress across socioeconomic status groups one way ANOVA was employed.

To analyze relationships between variables:

- To examine the relationship between cognitive flexibility and psychological distress Pearson product moment correlation coefficient was employed.
- A simple linear regression analysis is used to find out the contribution of cognitive flexibility on psychological distress.

RESULTS

Table 1: Descriptive statistics of samples' age, cognitive flexibility, and psychological distress, among university students.

Variables	N	Mean	Std. Deviation
Age	150	21.13	1.87
Cognitive Flexibility	150	97.92	13.59
Psychological Distress	150	25.88	7.92

Source: Processed by Researcher (2022)

Table 1 presents the mean scores for cognitive flexibility and psychological distress among university students, with the mean age of 21.13 (*SD* = 1.87) years. The values for cognitive flexibility have mean score of 97.92 (*SD* = 13.59) and psychological distress have mean score of 25.88 (*SD* = 7.92), respectively. Psychological distress scores for the sample ranged from 10 to 49, indicating a spectrum from mild to severe distress. This range suggests that individuals could be experiencing anything from relatively mild symptoms to severe psychological distress. The mean score for psychological distress indicates moderate distress levels. For those at the higher end of this spectrum, seeking comprehensive assessment and possibly intensive treatment is advisable. (Kessler et al., 2002; Hofmann, Asnaani, & Vonk, 2012). Cognitive Flexibility scores vary between 62 and 134, with a mean of 97.92 (*SD* = 13.59), suggesting that participants generally reported moderate to high levels of cognitive flexibility.

Table 2: Percentage of prevalence rate of psychological distress among university students.

Psychological Distress (K-10)	Percentage (%)
Well (10-19)	26%
Mild (20-24)	22%
Moderate (25-29)	23.3%
Severe (30-50)	28.7%
N (%)	150

Source: Processed by Researcher (2022)

Table 2 reveals the prevalence rate of psychological distress among university students. Around 26% of the total participants were likely to be well, 22% have mild psychological distress, 23.3% have a moderate level of psychological distress, and 28.7% are suffering from a severe form of psychological distress. A total of 74% of university students report some degree of psychological distress, a figure that underscores a concerning level of mental health issues. Specifically, half of the students' population experiences a high level of psychological distress. Hence, the results support the hypothesis *HA1, which states that there will be a significant level of psychological distress prevalent among university students.*

Table 3: Mean difference among scores of female and male students on cognitive flexibility and psychological distress

Variable	Gender	N	Mean	*SD*	*t*-value	df	*p*
Cognitive Flexibility	Female	68	93.47	11.33	-3.819	148	.001
	Male	82	101.62	14.25			
Psychological Distress	Female	68	28.41	8.07	3.703	148	.001
	Male	82	23.79	7.19			

Source: Processed by Researcher (2025)

Table 3 highlights gender related differences in cognitive flexibility and psychological distress between male and female students. For cognitive flexibility, males had a mean score of 101.62 (*SD* = 14.25), whereas females had a mean score of 93.47 (*SD* = 11.33). The t-test also shows a significant difference between genders, *t* = -3.819, *p* = .001, Cohen's *d* = -.626. The effect size indicates a moderate negative effect, suggesting a significant difference in cognitive flexibility score between genders.

For psychological distress, females exhibited a slightly higher mean score of 28.41 (*SD* = 8.07), and males had a mean score of 23.79 (*SD* = 7.19). The t-test revealed a significant difference between males and females, *t* = 3.703, *p* = .001, Cohen's *d* = .607. The effect size indicates a moderate positive effect, suggesting a significant difference in psychological distress score between genders. Therefore, the hypothesis *HA2, stating that there is a significant mean difference between males and females in cognitive flexibility and psychological distress among university students* is accepted.

Table 4: Mean difference between scores of urban and rural students on cognitive flexibility and psychological distress

Variable	Area of Residence	N	Mean	*SD*	*t*-value	df	*p*
Cognitive Flexibility	Urban	80	100.27	14.19	2.294	148	.023
	Rural	70	95.24	12.43			
Psychological Distress	Urban	80	25.51	8.17	-.617	148	.538
	Rural	70	26.31	7.66			

Source: Processed by Researcher (2025)

Table 4 shows the mean differences between urban and rural youth in cognitive flexibility and psychological distress scores. For cognitive flexibility, students from urban areas show a higher level of cognitive flexibility with a mean score of 100.27 (*SD* = 14.19) compared to students from rural areas with a mean score of 95.24 (*SD* = 12.43). The t-test result shows a significant difference in cognitive flexibility scores between the groups, *t* (148) = 2.294, *p* = .023. The effect size was small to moderate (Cohen's *d* = 0.375), indicating a modest but meaningful group difference.

For psychological distress, rural participants had a mean score of 25.51 (*SD* = 8.17), and urban participants had a mean score of 26.31 (*SD* = 7.66). The t-test revealed no significant differences between urban and rural areas, *t* (148) =-.617, *p* = .538. The effect size suggests a small effect (Cohen's *d* = -.101), indicating minimal psychological distress scores between urban and rural groups. Therefore, *HA3 is partially fulfilled as the significant difference was found in cognitive flexibility, with students from urban areas reporting higher levels of cognitive flexibility.*

Table 5: Mean difference between scores of socioeconomic statuses (upper vs. middle vs. lower) of students on cognitive flexibility and psychological distress

Variables	SES	N	Mean	*SD*	*F*	df	*p*
Cognitive Flexibility	Upper	51	94.23	12.70	2.922	2, 147	.057
	Middle	53	99.79	11.07			
	Lower	46	99.86	16.35			
Psychological Distress	Upper	51	27.58	7.49	2.276	2, 147	.106
	Middle	53	24.30	8.21			
	Lower	46	25.82	7.82			

Source: Processed by Researcher (2025)

Table 5 shows the mean difference between the socioeconomic status of university students for cognitive flexibility and psychological distress. In cognitive flexibility, the mean scores were 94.23 (*SD* = 12.70) for the upper group, 99.79 (*SD* = 11.07) for the middle group, and 99.86 (*SD* =16.35) for the lower group. The ANOVA result shows no significant difference between groups, F (2, 147) = 2.922, p = .057. The psychological distress the mean scores were 27.58(*SD* = 7.49) for the upper group, 24.30 (*SD* = 8.21) for the middle group, and 25.82 (*SD* = 7.82) for the lower group. The ANOVA result shows no significant difference between SES groups, F (2, 147) = 2.276, p = .106. Since the ANOVA result is not significant, further post hoc tests were not performed. Hence, the hypothesis, *HA4: There will be a significant difference in cognitive flexibility and psychological distress among university students based on their socioeconomic status* is rejected.

Table 6: Correlation Table of Cognitive Flexibility and Psychological Distress

	Cognitive Flexibility	**Psychological Distress**
Cognititve Flexibility	1	-.523**
Psychological Distress	-.523**	1

***Correlation is significant at the 0.001 level. (2-tailed)*

Table 6 examines the relationship between cognitive flexibility and psychological distress. The Pearson correlation coefficient between was r = -.523 (p<0.001, 2-tailed), which indicates a significant moderate negative correlation. It means that university students with higher cognitive flexibility report lower psychological distress. Therefore, hypothesis *HA5: There will be a significant negative relationship between cognitive flexibility and psychological distress among university students* is accepted.

Table 7: Summary of Linear Regression (Cognitive Flexibility as a predictor of Psychological Distress, N=150)

Predictor	***B***	**SE *B***	***β***	***t***	***R²***	**adj. *R²***
(Constant)	55.748	4.036		13.811		
Cognitive Flexibility	-.305	.041	-.523	-7.468	.274	.269

F (1,148) =55.775, p<.001
Note. B=unstandardized coefficient; SE B=standard error of B; β=standardized coefficient

Table 7 investigates the predictive relation between cognitive flexibility and psychological distress among university students. The model, with cognitive flexibility as predictor and psychological distress as dependent variable, was statistically significant, F (1,148) = 55.775, p<.001, indicating that cognitive flexibility significantly predicts psychological distress. The unstandardized coefficient (B = -.305, SE = .041) suggests that for every one-unit increase in cognitive flexibility, psychological distress decreases by approximately 0.305 units, holding other factors constant. The standardized coefficient (β = - 0.523) indicates a moderate negative relationship between the two variables. Consistent with the significant correlation (r = -.523) reported previously. The model explains 27.4% of the variance in psychological distress (R^2 = .274) by cognitive flexibility with an adjusted R^2 of .269. Hence, the results support hypothesis *HA6: Cognitive flexibility will emerge as a significant predictor of psychological distress among university students.*

DISCUSSIONS

The present aim of the study was to investigate whether cognitive flexibility predicts psychological distress and differences in these variables across various demographic and behavioral factors (gender, area of residence, and socioeconomic status) among university students.

The findings of this research suggest a high prevalence rate of psychological distress among the majority of students. A study done by Porru (2021) is in line with the result, as he also reports that among students, there is a high prevalence rate of psychological distress. This high prevalence may indicate mental health concerns and daily life disruptions in university students (Wang et al., 2022). It can be caused by several factors, and also because there are less awareness and access to counselling or mental health services for them. Also, mental health issues are still seen as taboo in countries in Asia where people tend to avoid talking about them and are hesitant to seek professional help.

Furthermore, the results show a significant gender difference, with males having higher cognitive flexibility than females. The results align with a study done by Karakuş (2024) and Sheikh (2025), who similarly concluded that males are more cognitive flexible than females. This could be attributed to many factors, including differences in cognitive strategies, problem-solving approaches, and neurological underpinnings (Thomas & Segal, 2006). Additionally, societal expectations and gender roles may influence the development and expression of cognitive skills, potentially contributing to the observed differences (Thomas & Segal, 2006*).*

Also, for psychological distress, results have shown that females experience more psychological distress than males, with previous studies (Reiss et al., 2019; Srivastava et al., 2021; Porru, 2021; Gebremedhin, 2020; Alavijeh, 2025). Kendler et al. (2001) also reported that females tend to be more sensitive to the depressogenic effects of interpersonal issues with those people who are within their close social network. Ruminative thinking is more prevalent among females and is associated with an increased risk of depression (Verma, 2011).

Gendered response theory tells us that women react with different emotions to life stress than men. According to this theory, women's reactions to life stress differ from men's. Specifically, women might feel depressed and anxious, whereas men might feel angry and agitated. So, if the surveys have more items asking about distress symptoms frequently observed in women than those of men, this may lead to women appearing falsely more distressed (Mirowsky, 1995).

The study also highlights a difference between participants from urban and rural residence areas in terms of cognitive flexibility and psychological distress. Students from urban areas show a higher level of cognitive flexibility than students from rural areas. Moreover, this difference is significant, which means urban students think more critically than those from rural areas. The result aligns with the study by Sharma & Sandhu (2025) and Malik et al. (2024). Urban students were found to think more critically than rural students, similar to findings by Tanti et al. (2020), Kurniawan (2016), and Darmaji et al. (2020), but contrasting with Tamam et al. (2021).

However, for psychological distress, no difference was shown in terms of area of residence. Both experience some level of psychological distress. This is in line with the study done by Baxter (2021). It can be explained that the development of technology has made life quite similar in some aspects, especially for students, as today, urban and rural area students depend on technology for studying, and their lifestyles have become quite similar, which was not possible before. So, the academic pressure experienced by students from both areas is quite similar, indicating that the difference was not significant.

The analysis also reveals that there is no significant mean difference in terms of socioeconomic status for both cognitive flexibility and psychological distress scores of students, where the upper class shows a low level of cognitive flexibility and a high level of psychological distress as compared to both the middle and lower classes (Poon, 2022). However, for distress, the result is the opposite of previous research (Huda, 2021). Though the mean difference is there, the result is not significant.

The findings also revealed a negative relationship between cognitive flexibility and psychological distress. This is consistent with previous research by Mohammadkhani (2022).

Turning to the regression result, cognitive flexibility emerged as a significant predictor of psychological distress among university students. It means that having higher cognitive flexibility acts as a buffer against stress and helps mitigate psychological distress among students.

The Transactional Model of Stress and Coping Theory provides an explanation for the relationship, which emphasizes the role of cognitive appraisal in evaluating threat, harm, and challenges, which subsequently is the outcome in the coping process of stressful events (Lazarus, 1966; Lazarus & Folkman, 1984). Due to external stressors, the amount of stress experienced in feelings, thoughts, behaviors, and emotions depends on how an individual appraises the situation. This appraisal involves evaluating and judging whether the external or internal demands exceed one's available resources and coping abilities. Stress is heightened when these demands surpass resources (Lazarus & Folkman, 1984).

From the perspective of this theory, due to external stressors, the amount of stress experienced in the form of emotions, thoughts, and behaviors varies based on the individual's assessment of the situation.

This evaluation involves assessing available resources and coping abilities to meet the internal or external demands that outweigh the available resources and coping abilities when those demands surpass what one can handle (Lazarus & Folkman, 1984).

So, students who show greater ability to adapt their thinking and generate alternative solutions experience lower levels of stress, anxiety, and depressive symptoms. The finding of the study is consistent with the Transactional Model of Stress and Coping proposed by Lazarus and Folkman (1984), which proposes that cognitive appraisal and coping flexibility reduce perceived stress. Similar results were reported by Martin and Rubin (1995) and Johnco et al. (2014), who found that flexible cognitive strategies are protective against mental health difficulties.

IMPLICATIONS AND CONCLUSION

This study explored the relationship between cognitive flexibility and psychological distress, finding a negative correlation between the two among university students.

The findings show that gender significantly influences both cognitive flexibility and psychological distress among university students. Specifically, males exhibit higher levels of cognitive flexibility and lower levels of psychological distress as compared to females. This proves the negative relationship between the two variables, as cognitive flexibility increases, the psychological distress decreases.

Urban students were found to think more critically and exhibit cognitive flexibility than their rural counterparts, and these differences were statistically significant. However, the differences between urban and rural students were not significant for psychological distress.

Students from the upper class had a low level of cognitive flexibility and a high level of psychological distress as compared to both the middle and lower classes, but the difference was not significant.

The negative correlation coefficient of -.523 obtained in this study indicates a strong inverse relationship between cognitive flexibility and psychological distress. This implies that as the individual's cognitive flexibility increases, the reported levels of psychological distress decrease. The significant negative correlation between cognitive flexibility and psychological distress highlights the importance of having the mental ability to adapt to changing situations and having control over stressful situations. When a person is cognitive flexible, they can easily handle demanding circumstances, which can be seen as a personal resource. It can be helpful if students are helped to improve their cognitive flexibility to mitigate stressful situations and improve their well-being. Additionally, the model is statistically significant, suggesting that cognitive flexibility significantly predicts psychological distress.

These results highlight the importance of interventions to enhance cognitive flexibility skills in university students as a potential strategy to buffer against psychological distress. So, further policies should focus on developing and improving students' cognitive flexibility to prepare them for life changes so that they can deal with them successfully. Educators, parents, and counsellors can draw on these insights to cultivate a proactive attitude toward personal development in young individuals.

Furthermore, in the Indian educational context, where mental health remains stigmatized and under-supported, this study provides culturally relevant data that can inform institutional policy and student wellness programs. It may encourage universities to incorporate cognitive flexibility training—through counseling, workshops, or curriculum—into their student support services.

Limitations and Future Directions

This study focuses only on quantitative data. This approach yields meaningful statistical findings but still falls short of fully capturing the range of human experiences and perspectives. Using qualitative or mixed methods may provide a broader, more nuanced knowledge of the phenomenon being studied.

The sample size of the study is relatively small and focuses on students. It can limit the generalizability of the findings to other groups. A larger sample would provide more robust and reliable results, potentially capturing a wider range of perspectives and behaviors.

This study is cross-sectional, which allows the collection of data at a single moment in time. Although it offers a quick look at the connection between cognitive flexibility and psychological distress, it does not enable the analysis of changes or patterns over time. A longitudinal study would investigate any possible causal connections.

This study is based on data collected exclusively from one city. While this provides valuable insights into this specific area, it may not fully capture the breadth of human experiences and viewpoints. Incorporating qualitative techniques may provide a broader, more nuanced knowledge of the phenomenon being studied.

REFERENCES

American College Health Association. (2021). *American College Health Association-National College Health Assessment III: Undergraduate student reference group executive summary spring 2021*. American College Health Association.

American Psychological Association. (n.d.). *Psychological distress*. In *APA dictionary of psychology*. Retrieved August 14, 2025, from https://dictionary.apa.org/psychological-distress

Asfaw, H., Yigzaw, N., Yohannis, Z., Fekadu, G., & Alemayehu, Y. (2020). Prevalence and associated factors of suicidal ideation and attempt among undergraduate medical students of Haramaya University, Ethiopia. A cross-sectional study. *PloS one*, *15*(8), e0236398.

Auerbach, R. P., Mortier, P., Bruffaerts, R., Alonso, J., Benjet, C., Cuijpers, P., ... & Kessler, R. C. (2018). WHO world mental health surveys international college student project: Prevalence and distribution of mental disorders. *Journal of abnormal psychology*, *127*(7), 623.

Baxter, G. L., Tooth, L. R., & Mishra, G. D. (2021). Psychological distress in young Australian women by area of residence: findings from the Australian Longitudinal Study on Women's Health. *Journal of Affective Disorders*, *295*, 390-396.

Campbell, F., Blank, L., Cantrell, A., Baxter, S., Blackmore, C., Dixon, J., & Goyder, E. (2022). Factors that influence mental health of university and college students in the UK: a systematic review. *BMC public health*, *22*(1), 1778.

Cañas, J., Quesada, J., Antolí, A., & Fajardo, I. (2003). Cognitive flexibility and adaptability to environmental changes in dynamic complex problem-solving tasks. *Ergonomics*, *46*(5), 482-501.

Dennis, J. P., & Vander Wal, J. S. (2010). The cognitive flexibility inventory: Instrument development and estimates of reliability and validity. *Cognitive therapy and research*, *34*(3), 241-253.

Gabrys, R. L., Tabri, N., Anisman, H., & Matheson, K. (2018). Cognitive control and flexibility in the context of stress and depressive symptoms: The cognitive control and flexibility questionnaire. *Frontiers in psychology*, *9*, 2219.

Gebremedhin, H. T., Bifftu, B. B., Lebessa, M. T., Weldeyes, A. Z., Gebru, T. T., & Petrucka, P. (2020). Prevalence and Associated Factors of Psychological Distress Among Secondary School Students in Mekelle City, Tigray Region, Ethiopia: Cross-Sectional Study. *Psychology research and behavior management*, *13*, 473–480. https://doi.org/10.2147/PRBM.S252779

Gibbons, S., Trette-McLean, T., Crandall, A., Bingham, J. L., Garn, C. L., & Cox, J. C. (2019). Undergraduate students survey their peers on mental health: Perspectives and strategies for improving college counseling center outreach. *Journal of American college health*, *67*(6), 580-591.

Gilavand, A., Khoshouie, B., & Mohamadpour, S. (2023). Investigating the prevalence of depression, anxiety, stress, and worry, and its relationship with the academic performance of medical students during the COVID-19 pandemic in Iran. *Jundishapur J Chronic Dis Care*, *12*, e137714. https://doi.org/10.5812/jjcdc-137714.

Hofmann, S. G., Asnaani, A., Vonk, I. J., Sawyer, A. T., & Fang, A. (2012). The efficacy of cognitive behavioral therapy: A review of meta-analyses. *Cognitive therapy and research*, *36*(5), 427-440.

Huda, M. N., Billah, M., Sharmin, S., Amanullah, A. S. M., & Hossin, M. Z. (2021). Associations between family social circumstances and psychological distress among the university students of Bangladesh: To what extent do the lifestyle factors mediate?. *BMC psychology*, *9*(1), 80. https://doi.org/10.1186/s40359-021-00587-6

Hunt, J., & Eisenberg, D. (2010). Mental health problems and help-seeking behavior among college students. *Journal of adolescent health*, *46*(1), 3-10.

Johnco, C., Wuthrich, V. M., & Rapee, R. M. (2014). The influence of cognitive flexibility on treatment outcome and cognitive restructuring skill acquisition during cognitive behavioural treatment for anxiety and depression in older adults: Results of a pilot study. *Behaviour research and therapy*, *57*, 55-64.

Karakuş, İ. (2024). University students' cognitive flexibility and critical thinking dispositions. *Frontiers in psychology*, *15*, 1420272.

Kendler, K. S., Thornton, L. M., & Prescott, C. A. (2001). Gender differences in the rates of exposure to stressful life events and sensitivity to their depressogenic effects. *American Journal of Psychiatry*, *158*(4), 587-593.

Kessler, R. C., Barker, P. R., Colpe, L. J., Epstein, J. F., Gfroerer, J. C., & Hiripi, E. (1996). Kessler psychological distress scale (K10). *Boston, MA: Harvard Medical School*.

Kurniawan, D. A., Perdana, R., & Ikhlas, M. (2020). Do a Science Process Skills Affect on Critical Thinking in Science? Differences in Urban and Rural. *International Journal of Evaluation and Research in Education*, *9*(4), 874-880.

Kurniawan, I. S. (2016). Implementation of Problem Based Learning Open Ended to Improved Critical Thinking and Mastery of The Concept of Students on The Material Circulatory System in School Urban and Rural. *Research Report*.

Lazarus, R. S. (1966). Psychological stress and the coping process.

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer Publishing Company.

Malik, A. M. K. S., & Patra, S. (2024). Exploring the link between critical thinking and cognitive flexibility among university students. *INSPA Journal of Applied and School Psychology, 6*(Special Issue), 390-399.

Martin, M. M., & Rubin, R. B. (1995). A new measure of cognitive flexibility. *Psychological Reports*, *76*(2), 623-626.

Mirowsky, J., & Ross, C. E. (1995). Sex differences in distress: Real or artifact?. *American Sociological Review*, 449-468.

Mirzaei-Alavijeh, M., Najafi, F., Veis, R. G., Moradinazar, M., Farasati, F., & Jalilian, F. (2025). Psychological distress and its association with gender, socioeconomic status, education and health conditions. *Scientific Reports*, *15*(1), 29142. https://doi.org/10.1038/s41598-025-14848-6

Mohammadkhani, S., Foroutan, A., Akbari, M., & Shahbahrami, M. (2022). Emotional schemas and psychological distress: Mediating role of resilience and cognitive flexibility. *Iranian Journal of Psychiatry*, *17*(3), 284.

Sheikh, M., Nahar, N., Yesmin, S., Mahamud, M. O., Parvin, M., & Rahman, M. (2025). The impact of cognitive flexibility and optimism on burnout and stress levels in medical students: A psychological perspective. *International Journal of Latest Technology in Engineering, Management & Applied Science, 14*(6), 602–608. https://doi.org/10.51583/IJLTEMAS.2025.140600068

Porru, F., Robroek, S. J., Bültmann, U., Portoghese, I., Campagna, M., & Burdorf, A. (2021). Mental health among university students: The associations of effort-reward imbalance and overcommitment with psychological distress. *Journal of Affective Disorders*, *282*, 953-961.

Poon, K., Ho, M. S. H., & Chou, K. L. (2022). Executive functions as mediators between socioeconomic status and academic performance in Chinese school-aged children. *Heliyon*, *8*(10), e11121. https://doi.org/10.1016/j.heliyon.2022.e11121

Ridner, S. H. (2004). Psychological distress: concept analysis. *Journal of Advanced Nursing*, *45*(5), 536-545.

Reiss, F., Meyrose, A. K., Otto, C., Lampert, T., Klasen, F., & Ravens-Sieberer, U. (2019). Socioeconomic status, stressful life situations, and mental health problems in children and adolescents: Results of the German BELLA cohort study. *PLOS ONE, 14*(3), e0213700.

Ridner, S. H. (2004). Psychological distress: concept analysis. *Journal of advanced nursing*, *45*(5), 536-545.

Sahu, P. K., Nayak, B. S., Rodrigues, V., & Umakanthan, S. (2020). Prevalence of Psychological Distress among Undergraduate Medical Students: A Cross-Sectional Study. *International Journal of Applied & Basic Medical Research*, *10*(4), 270–275. https://doi.org/10.4103/ijabmr.IJABMR_100_19

Scott, W. A. (1962). Cognitive complexity and cognitive flexibility. *Sociometry*, 405-414.

Sharma, C., & Sandhu, K. (2025). Impact of Rural, Urban Areas and Cognitive Flexibility on Divergent Thinking of Undergraduate Students. *International Journal of Indian Psychology*, *13*(1).

Sheikh, M. J., Nahar, N., Yesmin, S., Mahamud, M. O., Parvin, M., & Rahman, M. A. (2025). The Impact of Cognitive Flexibility and Optimism on Burnout and Stress Levels in Medical Students: A Psychological Perspective. *International Journal of Latest Technology in Engineering, Management & Applied Science*, *14*(6), 602-608.

Srivastava, S., Purkayastha, N., Chaurasia, H., & Muhammad, T. (2021). Socioeconomic inequality in psychological distress among older adults in India: a decomposition analysis. *BMC Psychiatry*, *21*(1), 179.

Tamam, B., Corebima, A. D., Zubaidah, S., & Suarsini, E. E. (2021). An investigation of Rural-Urban students' critical thinking in biology across gender. *Pedagogika*, *142*(2), 200-217.

Tanti, T., Kurniawan, D. A., Kuswanto, K., Utami, W., & Wardhana, I. (2020). Science process skills and critical thinking in science: Urban and rural disparity. *Jurnal Pendidikan IPA Indonesia*, *9*(4), 489-498.

Thomas, J. C., & Segal, D. L. (Eds.). (2006). *Comprehensive handbook of personality and psychopathology: Vol. 1. Personality and everyday functioning*. John Wiley & Sons.

Verma, R., Balhara, Y. P., & Gupta, C. S. (2011). Gender differences in stress response: Role of developmental and biological determinants. *Industrial Psychiatry Journal*, *20*(1), 4–10. https://doi.org/10.4103/0972-6748.98407

Wang, S., Quan, L., Chavarro, J. E., Slopen, N., Kubzansky, L. D., Koenen, K. C., ... & Roberts, A. L. (2022). Associations of depression, anxiety, worry, perceived stress, and loneliness prior to infection with risk of post–COVID-19 conditions. *JAMA psychiatry*, *79*(11), 1081-1091. doi.org/10.1001/jamapsychiatry.2022.2640

Zhu, Y., Jha, S. C., Shutta, K. H., Huang, T., Balasubramanian, R., Clish, C. B., ... & Kubzansky, L. D. (2022). Psychological distress and metabolomic markers: A systematic review of posttraumatic stress disorder, anxiety, and subclinical distress. *Neuroscience & Biobehavioral Reviews*, *143*, 104954.

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Conflict of Interest

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