

## Mindfulness-Based Cognitive Behavioural Therapy in Reducing Academic Procrastination And Increasing Mindfulness Among College Students

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This study was designed to assess the efficacy of Mindfulness-Based Cognitive Behavioral Therapy (MBCT) in reduction of academic procrastination and increasing mindfulness among college students. 30 students (aged 17–22 years) were selected and randomly assigned to either an experimental group or a control group. The academic procrastination scale (Karla Silva Soares et al., 2022) and mindful attention awareness scale (Brown & Ryan, 2003) were administered. Participants in experimental group underwent an 8-week offline MBCT program. Non-parametric analyses using the Wilcoxon Signed-Rank Test indicated a significant improvement in mindfulness scores ( $Z = 3.207, p = .001$ ) and a significant decrease in academic procrastination scores ( $Z = 2.953, p = .003$ ) and Mann–Whitney U test indicated significant post-intervention differences between the experimental and control groups in mindfulness ( $U = 19.500, p = .001$ ) and academic procrastination ( $U = 51.000, p = .003$ ). MBCT intervention is a practical and effective approach.

**Keywords:** Mindfulness-Based CBT; academic procrastination; college students; mindfulness; adolescents

In the world of numerous ways to stay easily connected and entertained today, it is unsurprising that procrastination has emerged as a widespread behaviour, the act of postponement of tasks even when aware of possible negative consequences are more usual than ever (Steel, 2007). Academic procrastination refers to “the intentional and detrimental delay of academic tasks, including studying, exam preparation, or doing assignments, in spite of knowing that such delay may result in negative outcomes like elevated stress levels, unsatisfactory academic results, and sense of guilt” (Kumar et al., n.d.). The phenomenon is often interpreted as difficulty in self-regulation, where students find it challenging to initiate or complete academic tasks even when those tasks have been planned or intended.

Empirical studies have consistently shown that university students worldwide continue to experience high rates of procrastination, due to difficulties related to time constraints, emotional distress, and demanding coursework (Yue et al., 2024). Such behaviour is linked to increased stress, reduced academic performance, and difficulties in self regulation and emotional control (Liam Moloney, 2024). While stress and negative affect often trigger academic procrastination, mindfulness strengthens self-awareness and emotional control, allowing individuals to manage any kind of distressing situations.

Evidence from a randomised controlled trial indicates that mindfulness-based interventions significantly reduced

procrastination tendencies among university students (Rad et al., 2023). By fostering present-moment awareness and acceptance, which enable individuals to identify thoughts and emotions without reacting impulsively or avoiding them. Complementary findings from a study among Chinese adolescents show that mindfulness interventions effectively decreased procrastination by increasing academic engagement. (Yue et al., 2024). Consistent with these outcomes, a cross-sectional study with Chinese nursing students suggests that mindful awareness enhances behavioural regulation and reduces avoidance-driven tendencies. (Li et al., 2023).

By combining mindfulness exercises with cognitive-behavioural methods, enabling individuals to restructure maladaptive cognitions, foster emotional regulation, and engage in purposeful actions. A modified intervention, termed MBCT-P, was implemented among Indonesian university students, that produced strong outcomes reflecting notable reductions in academic procrastination and enhancing sustained attention, intrinsic motivation, and academic commitment. (Suhadianto et al., 2024). In Iran, a semi experimental study of procrastinating undergraduates found that MBCT increased positive academic emotions (pleasure, hope, pride) and decreased negative emotions (anger, anxiety, shame, disappointment) compared to a control group (Asani et al., 2022). Further, a quasi experimental study indicated that MBCT was more effective than reality therapy in increasing positive emotions and academic meaning among procrastinating students (Asani et al., 2023).

These results indicate that MBCT is a potential intervention for academic procrastination, as it addresses both cognitive — unproductive beliefs, perfectionism, fear of failing — and emotional — stress, avoidance, poor motivation —

dimensions of procrastination. Students learn to detect when they want to put things off, tolerate uncomfortable feelings, and get back to work on chores in a purposeful way through mindfulness activities. By guiding individuals to recognize and correct maladaptive thinking patterns that lead to avoidance, cognitive restructuring encourages individuals to carefully examine and replace unhelpful or irrational thoughts that contribute to avoidance.

Given that mindfulness concepts have historical roots in Indian contemplative traditions, Indian students may find mindfulness practices familiar and culturally acceptable, when delivered through a structured MBCT program. Moreover, there is a need for structured mindfulness-based programs specifically targeted at academic procrastination among Indian college students. Therefore, the present study aimed to evaluate the effectiveness of an 8-week MBCT programme in reducing academic procrastination and improving mindfulness among undergraduate students.

Based on the literature reviewed above, it was hypothesized that undergraduate students who participated in the 8-week MBCT program would show significantly lower academic procrastination and higher mindfulness compared to those who did not receive the intervention.

## Method

### Sample

From an initial screening of 210 undergraduate students from a college in Coimbatore, 30 students who scored high on academic procrastination were selected using purposive sampling. They were randomly assigned to the experimental and control groups in equal numbers. Participants' ages ranged from 17 to 22 years ( $M = 19.8$ ,  $SD = 1.2$ ), and both male and female students were included. Inclusion criteria required students to (a) be enrolled in undergraduate courses,

(b) report elevated procrastination scores on the screening tool, and (c) provide informed consent. Participants were excluded from the study if they were (a) were undergoing current psychiatric treatment, (b) individuals with severe psychological disorders, and (c) lack of willingness to attend all sessions. The final sample size corresponded with the range typically used in exploratory MBCT studies (Scent & Boes, 2014).

### Measures

*The Academic Procrastination Scale* (APS; Karla Silva Soares et al., 2022) was utilized to measure how often and how intensely university students engage in procrastination. This scale consists of 25 self-report items rated on a five-point Likert scale ranging from 1 (Never) to 5 (Always). A higher score on the scale denotes a greater level of academic procrastination. The items describe common procrastination behaviours such as postponing the start of tasks, doing work at the last moment, and avoiding projects even when time is sufficient. An example of an item is, “*I put off projects until the last minute*”. Prior research has confirmed the scale’s high internal consistency, reporting Cronbach’s alpha coefficients between .90 and .94, thereby establishing the APS as a psychometrically sound instrument.

*The Mindful Attention Awareness Scale* (MAAS; Brown & Ryan, 2003) employed to measures dispositional mindfulness, which is an individual’s general tendency to remain aware of and be attentive to present-moment experiences in daily life. The scale includes 15 self-report items rated on a six-point Likert

scale ranging from 1 (Almost always) to 6 (Almost never), where higher scores signify greater mindfulness. The items show everyday examples of being unaware, such as doing things automatically without awareness of one’s thoughts and surroundings. An example item is, “*I find myself doing things without paying attention*”. The MAAS has exhibited high internal consistency, with Cronbach’s alpha coefficients between .80 and .87, signifying good reliability.

A structured demographic data sheet was employed to obtain relevant participant information. The data collected included variables such as age, gender, year of study, and socio-economic background. These data helped in describing the characteristics of the study population.

### Procedure

After screening with the APS and MAAS, participants were randomly placed into either experimental group (15 students) or control group (15 students). The experimental group attended an 8-week, in-person MBCT program held at the college campus. Mindfulness journal were maintained and attendance were recorded weekly. As the sessions were engaging, the groups were small, and reminders were given regularly, no one dropped out. Over the course of 8-weeks, MBCT intervention was implemented consisting of one session per week. Each 60-minute session combining mindfulness exercises and cognitive-behavioural methods were designed to decrease academic procras-

stination and strengthen mindfulness. The content of the sessions is given in Table 1.

Table 1. Summary of Mindfulness-Based Cognitive Therapy (MBCT) Sessions	
Sessions	Content of Sessions
Week 1: Orientation and Psychoeducation	Educating participants about academic procrastination and mindfulness. The activities included building rapport, a group icebreaker called a

<p>Week 2: Body Scan Meditation and Awareness of Triggers</p>	<p>“one-minute talk,” and teaching about procrastination patterns. For practice, participants learned to use the box breathing method to improve their awareness. For homework, they were asked to spend ten minutes each day practicing box breathing.</p> <p>Boosting awareness of body and recognizing procrastination triggers can be achieved through guided body scan meditation and some thoughtful sharing. For practice, participants were asked to try a 15-minute body scan meditation every day. For homework, they must have a journal where they jot down any physical and emotional cues that pop up right before they procrastinate.</p>
<p>Week 3: Cognitive Restructuring of Procrastination Thoughts</p>	<p>To tackle procrastination habits, participants were helped to spot and change those unhelpful thought patterns. They engaged in group discussions and do some cognitive restructuring exercises to help them out. For practice, participants kept a thought record, and for homework, they were asked to identify and reframe at least one procrastination-related thought each day.</p>
<p>Week 4: Mindful Breathing and Time Management</p>	<p>Improving focus and introducing conscious time management. Activities included guided mindful breathing, SMART goal setting, and prioritizing tasks. For practice, participants did mindful time-blocking for tasks they had to finish. For homework, they were asked to implement time management plan in daily study schedule and think about how well it worked.</p>
<p>Week 5: Acceptance and Mindful Action</p>	<p>Embracing avoidance via acceptance-based strategies and mindful involvement. This included conversations about feelings of discomfort when starting a task and some acting out of situations. For practice, participants were asked to do the “urge surfing” meditation. For homework, they were asked to practice mindful acceptance on one difficult task every day.</p>
<p>Week 6: Problem-Solving and Planning Strategies</p>	<p>Developing structured approaches to handle academic challenges through group problem-solving and planning exercises. For practice, participants tried to handle the challenging thoughts by using the problem-solving techniques. For homework, they tried to apply problem-solving steps for an upcoming academic deadline.</p>
<p>Week 7: Self-Compassion and Reducing Fear of Failure</p>	<p>Fostering emotional resilience and self-kindness through loving-kindness meditation and reflection on self-criticism. For practice, participants learned to write a compassionate letter to oneself. For homework, they were asked to practice self-compassion meditation (10 minutes daily).</p>
<p>Week 8: Consolidation and Relapse Prevention</p>	<p>Integrating learned skills and planning for continued mindfulness practice. Activities included reviewing previous sessions, group feedback and discussing maintenance of progress. For practice, participants learnt 20-minute guided mindfulness combining breath, body, and thought awareness. For homework, they were asked to create a personal plan for ongoing mindfulness and goal maintenance.</p>

No intervention was administered to the control group during the study, but was offered the opportunity to participate in the program following the post-test assessment. Both the experimental and control groups completed the APS and MAAS at the beginning (pre-test) and end of the 8-week intervention period (post-test).

### Results

Table 2. Descriptive Statistics

Variable	Min	Max	<i>M</i>	<i>SD</i>
Academic Procrastination				
Before	90	125	107.03	12.215
After	55	122	96.67	16.769
Mindfulness Before	1	4	2.27	1.048
Mindfulness After	1	6	3.3	1.822

Table 3. Wilcoxon Signed-Rank Test Results

Variable	Group	Negative Ranks (N)	Positive Ranks (N)	Ties	Z-value	p-value
Mindfulness (After–Before)	Control	8	14	8	2.839	.005
Academic Procrastination (After–Before)	Control	19	11	0	2.099	.036
Mindfulness (After–Before)	Experimental	1	13	1	3.207	.001
Academic Procrastination (After–Before)	Experimental	12	3	0	2.953	.003

The analysis using the Wilcoxon Signed-Rank test in Table 3 indicated a statistically significant improvement in mindfulness scores ( $Z = 3.207$ ,  $p = .001$ ) and a significant decrease in academic procrastination ( $Z = 2.953$ ,  $p = .003$ ) among the experimental group participants following the MBCT intervention. The control group also showed

An analysis of the descriptive statistics in Table 2 presented the minimum, maximum, mean and standard deviation scores for both mindfulness and academic procrastination measured before and after the intervention. The findings indicated a notable rise in the mean mindfulness score, which increased from 2.27 to 3.3 after the intervention, suggesting that participants became more mindful after the program. Simultaneously, the mean academic procrastination score decreased from 107.03 to 96.67, reflecting a decline in procrastinatory behaviours. This pattern of results shows that the intervention successfully increased mindfulness and decreased procrastination among the participants. Nevertheless, inferential statistics were carried out on the data to check if the mean difference is significant.

some statistical changes; however, these differences were negligible and are likely due to random variation or test–retest effects rather than a genuine intervention impact. Therefore, it can be inferred that the MBCT intervention was successful in improving mindfulness and decreasing academic procrastination among students.

Table 4. Mann–Whitney U test Results

Variable	Group	Mean Rank	Sum of Ranks	U	Z	p-value
Mindfulness (After)	Control	9.47	142	19.50	3.437	.001
	Experimental	21.53	323			
Academic Procrastination (After)	Control	21.73	326	51	2.932	.003
	Experimental	9.27	139			

Results from Mann-Whitney U test in Table 4 revealed a statistically significant difference between control and experimental groups in mindfulness and academic procrastination following the intervention. Students in the MBCT group showed markedly increased mindfulness levels ( $U = 19.50, p = .001$ ) and decreased academic procrastination ( $U = 51, p = .003$ ) than those in the control group. These findings indicate that the Mindfulness-Based Cognitive Therapy program effectively enhanced mindfulness and reduced procrastination among students.

### Discussion

The effectiveness of an 8-week MBCT program in reducing academic procrastination and enhancing mindfulness among college students was tested in the present study. The results supported the hypothesis that students who participated in MBCT program effectively reduced academic procrastination and improved in mindfulness, while the control group remained largely unchanged.

The observed decline in procrastination in the experimental group shows that mindfulness intervention addresses the cognitive and emotional factors that lead to academic delay. Similar to the results reported by Rad et al. (2023), who found that Mindfulness-based programs decreased procrastination among university students. The current study indicates that MBCT improves students' attentiveness to their thoughts and emotions, which lessens the tendency to avoid tasks. Mindfulness can lower procrastination by encouraging greater involvement in learning activities and fostering a constructive academic mindset (Yue et al., 2024). Also, mindfulness plays a key role in reducing procrastination by improving attention and helping students begin tasks more effectively (Li et al., 2023).

This study's result shows that MBCT helped participants stay aware of the present moment and accept their experiences without judgment. Earlier studies Scent (2014) and Eckert et al., (2016) also found that mindfulness training improves attention and reduces procrastination. The MBCT program seemed to help students notice urges to procrastinate without giving in to them, supporting Suhadianto et al. (2024), who reported that MBCT-P reduced procrastination and improved focus among university students. It also improved emotional balance and motivation, both of which are connected to lower levels of procrastination (Asani et al., 2022).

These findings highlight that mindfulness is associated with reduced academic procrastination, as MBCT encourages students to respond thoughtfully to their inner experiences instead of avoiding their studies. These suggest that MBCT is a useful, evidence-based way to help students overcome procrastination. This study also shows that MBCT fits well within the Indian college context, where students find mindfulness-based programs both meaningful and acceptable.

Increased mindfulness through MBCT helps learners maintain focus on their academic goals and reduce procrastination. These findings underscore the significance of adopting structured mindfulness interventions in educational settings to foster productive study behaviors, sustained engagement, and enhanced academic success.

The observed effectiveness might be due to participant engagement and Indian contemplative traditions where the mindfulness-based practices are rooted. The cognitive-behavioural component challenges irrational beliefs ("I must be perfect to succeed"), while mindfulness practices help individuals observe thoughts

and urges nonjudgmentally, reducing automatic avoidance.

This study findings indicate that produce positive behavioural changes can be produced by MBCT even in a brief intervention period. The in-person group-based sessions helped students stay engaged and benefit more from the program by promoting social support, accountability, and collective motivation. Overall, these results highlight that MBCT is an effective and practical intervention for reducing academic procrastination and strengthening mindfulness among college students.

### Conclusion

This study showed that an 8-week MBCT program significantly decreased academic procrastination and improved mindfulness among college students. By combining cognitive restructuring with mindfulness meditation, the intervention enabled participants to manage procrastinatory thoughts, regulate emotions, and act with greater intention. MBCT appears to be practical, effective, and culturally appropriate short-term intervention that can be implemented within college counseling and wellness programs to strengthen students' focus, emotional balance, and academic performance.

The results indicate that MBCT is an effective intervention for decreasing academic procrastination and cultivate mindfulness among students. To support student mental health and academic performance, universities could include such programs into counseling centers or wellness initiatives. Future research must aim to replicate these findings with larger, more diverse groups and include follow-up sessions to evaluate long-term effects. Subsequent studies could compare MBCT with other well-known interventions, such as cognitive-behavioural therapy or behavioural activation, to understand its unique

effectiveness in decreasing academic procrastination.

Although the findings are encouraging, several limitations should be considered. The study included a relatively small number of participants (N = 30), which makes it difficult to generalize the results to a larger population. It also relied on self-report measures, which may be influenced by social desirability or memory errors. In addition, the study did not include a long-term follow-up, so it is unclear whether the effects of the intervention are lasting. Finally, because the control group did not receive an active intervention, it is difficult to rule out the influence of expectancy effects.

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