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Effectiveness of Mindfulness-Based Cognitive Counseling Integrated with Construal Level Theory for University Students' Mental Health

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Abstract: Mental health problems among university students, notably stress, anxiety, and depression, continue to increase, negatively impacting psychological functioning and academic performance. This study evaluated the effectiveness of an integrated Mindfulness-Based Cognitive Counseling (MBCC) and Construal Level Theory (CLT) intervention in improving students' mental health. A quasi-experimental pretest-posttest design with a control group was employed, with 24 participants (12 intervention, 12 control) selected via purposive sampling. Instruments included DASS-21, Five Facet Mindfulness Questionnaire, and a CLT-based psychological distance scale. MANOVA results showed a significant multivariate effect of the intervention (Wilks' $\Lambda = .68$; $F(3, 21) = 3.28$; $p = .041$; $\eta^2 = .32$). Univariate analyses indicated significant reductions in psychological distress ($p = .005$), and significant increases in mindfulness ($p = .002$) and psychological distance ($p = 0.023$). These findings suggest that the integrated MBCC-CLT intervention is effective in enhancing mental health among university students by reducing distress and promoting adaptive awareness and cognitive appraisal.

Key Words: Mindfulness-Based Cognitive Counseling; Construal Level Theory; Mental Health; University Students.

INTRODUCTION

Mental health issues among university students are increasingly recognised as a critical global public health concern. International epidemiological evidence shows that about one-third of students face significant psychological distress, including depression, anxiety, and stress, which affect their well-being and academic performance (Auerbach et al., 2018; Evans et al., 2018). These issues have worsened due to rising academic pressures, financial difficulties, and psychosocial challenges post-pandemic, leading to calls for targeted, evidence-based interventions designed specifically for students (Bruffaerts et al., 2019; Son et al., 2020). Recent large-scale national data further support this global trend; a 2023 multi-stage epidemiological survey with 41,620 valid responses from 106 Chinese universities found prevalence rates of 9.8% for depressive symptoms, 15.5% for anxiety symptoms, and 6.5% for comorbid depression and anxiety, with significant variation across demographic and health-related factors (Han et al., 2025). Collectively, these findings underline an urgent need for innovative conceptual and practical approaches to address the complex and culturally diverse factors influencing student mental health.

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The global pattern is also evident in Indonesia, where national surveys and campus-based studies consistently reveal significant psychological distress among university students. Research has documented high levels of stress, anxiety, and depressive symptoms connected to academic workload, financial pressures, and transition-related challenges (Ambarwati et al., 2020). Although awareness of mental health issues in Indonesia has grown, psychological services, including those within university settings, still face serious limitations in terms of accessibility, professional resources, and theoretical foundation. Putri et al. (2021) emphasise that Indonesia's mental health system is hindered by limited access to service information, uneven distribution of mental health practitioners, and low mental health literacy among both the public and professionals, which directly restricts the quality and availability of psychological support across higher education institutions.

Recent empirical studies further emphasise the scale of this challenge. Kotera et al. (2022) found that Indonesian university students reported significantly higher levels of depression, anxiety, and stress compared to their UK counterparts, with mental health shame particularly negative family attitudes towards mental illness being strongly linked to poorer psychological outcomes. Similarly, among medical students, 22.2% reported depressive symptoms, and 48.1% reported anxiety, with dysfunctional coping strategies and low resilience predicting greater psychological distress (Ramadianto et al., 2022). Earlier prevalence estimates also indicate a substantial mental health burden; Marthoenis et al. (2018) reported that 18.8% of college students experienced depression and 27.4% experienced anxiety. More recent findings by Irawan et al. (2025) show that approximately 30.6% of students experience stress, influenced by financial dissatisfaction and limited social support. Collectively, these studies illustrate a persistent and widespread burden of mental health problems among Indonesian university students and emphasise that structural barriers such as stigma, shame, and limited mental health literacy continue to restrict adequate psychosocial support (Kotera et al., 2022). Consequently, many higher education institutions still lack comprehensive mental health services or culturally sensitive intervention frameworks, reinforcing the urgent need for context-responsive and theoretically grounded mental health interventions.

Mindfulness-based interventions (MBIs) have gained substantial empirical support as effective approaches for enhancing emotional well-being among young adults. Mindfulness, defined as nonjudgmental awareness of present-moment experiences (Kabat-Zinn, 2003), has been shown to reduce stress reactivity, improve emotional regulation, and bolster psychological resilience (Creswell, 2017). Meta-analytic evidence indicates that programmes such as Mindfulness-Based Cognitive Therapy (MBCT) and Mindfulness-Based Stress Reduction (MBSR) consistently reduce symptoms of anxiety, depression, and stress across both clinical and non-clinical populations (Blanck et al., 2018; Hopwood & Schutte, 2017; Galante et al., 2021). However, despite their proven effectiveness, emerging literature emphasises the importance of identifying the mechanisms through which mindfulness facilitates change. Lam et al. (2024) highlights that uncovering and understanding these mechanisms enables mental health professionals to pinpoint the most critical components for therapeutic effects and optimise intervention outcomes accordingly. Therefore, although MBIs provide significant benefits, there remains an urgent need to clarify *how* and *why* they work, and to explore their integration with complementary theoretical frameworks to resolve existing conceptual ambiguities (Van Dam et al., 2018).

A key theoretical challenge in mindfulness research involves clarifying its mechanisms, especially concerning the role of psychological distance and cognitive construal. Some perspectives argue that mindfulness reflects low-level construal and increased sensory proximity, bringing attention closer to present sensations and emotions (Shapiro et al., 2018). However, other scholars

suggest that mindfulness promotes higher-level construal by enabling individuals to observe thoughts and feelings from a distanced, decentered perspective (Bernstein et al., 2019). These seemingly contradictory interpretations highlight a conceptual gap existing theories do not fully explain how mindfulness can simultaneously involve closeness to experience and distance from cognition. This theoretical ambiguity offers an opportunity to connect mindfulness with a broader framework such as Construal Level Theory.

Construal Level Theory (CLT) provides a systematic framework for understanding how individuals interpret events based on psychological distance whether temporal, spatial, social, or hypothetical (Liberman & Trope, 2008; Trope & Liberman, 2010). According to CLT, greater psychological distance leads to higher-level, abstract construals, whereas smaller distances encourage concrete, detail-oriented processing. CLT has been extensively applied in research on emotion regulation, decision making, and cognitive flexibility (Fujita & Carnevale, 2012; Soderberg et al., 2015). By offering a structured explanation of how distance influences cognition, CLT addresses gaps in mindfulness theories, which often do not explicitly explore how individuals shift between concrete and abstract mental representations during emotional experiences.

Recent research has suggested combining mindfulness and CLT as a unified approach to understanding emotional regulation. Bigman-Peer and Yovel (2024) introduced a two-dimensional model proposing that mindfulness involves *low psychological distance from external sensory experiences* and *high psychological distance from internal thoughts*. This dual process promotes both present-moment awareness and decentering from thoughts. This integration suggests that mindfulness-based interventions could be improved by explicitly applying CLT principles to enhance students' ability to switch between experiential awareness and abstract cognitive framing. Such a model provides a theoretically richer foundation for interventions targeting both attentional and interpretative pathways in psychological distress.

University students often face demanding cognitive and emotional pressures, such as academic overload, high performance expectations, and recurring maladaptive thinking patterns, such as rumination. These challenges require both staying grounded in the present moment and adjusting psychological distance when evaluating academic and personal stressors. Mindfulness-Based Cognitive Counselling (MBCC), an adaptation of MBCT for counselling, combines mindful awareness and cognitive restructuring to reduce automatic adverse reactions and enhance adaptive appraisal of stressful situations. Conceptual analyses suggest that mindfulness promotes low-level construal a focus on immediate experience thus decreasing overgeneralised and emotionally charged interpretations (Bigman-Peer & Yovel, 2024). Meta-analytic evidence indicates that psychological distancing reliably reduces emotional intensity, with effects varying by emotion type (Moran & Eyal, 2022). Experimental and mediation studies further show that self-distancing an observer-like perspective and reduced avoidance help explain how trait mindfulness improves responses to emotional challenges (Petrova et al., 2021). Combining MBCC with Construal Level Theory, therefore, offers a dual-process mechanism that merges mindful concreteness with flexible abstraction, which is especially beneficial for university students whose stress responses are influenced by both immediate pressures and future-oriented academic demands.

Building on these theoretical foundations, this study aimed to assess the effectiveness of an MBCC-CLT intervention in enhancing university students' mental health. The research examined its impact on stress, anxiety, and depression (DASS-21), mindfulness levels (FFMQ), and psychological distance (CLT-based scale). This investigation seeks to provide empirical evidence supporting the integration of mindfulness and CLT and to present a theoretically grounded, contextually relevant model to improve mental health interventions in higher education settings.

METHOD

Participants

A total of 24 undergraduate students participated in the study and were recruited through purposive sampling to identify individuals who met the specific psychological criteria required for safe and meaningful engagement in the intervention (Tabachnick & Fidell, 2013; Palinkas et al., 2015). This sample size is methodologically appropriate for preliminary behavioral intervention research, meeting the minimum threshold of 12 participants per group needed to detect within-subject change and supporting adequate statistical power for a repeated-measures design assuming a medium effect size ($d = 0.50$; power $> .80$). In small sample quasi-experimental designs, purposive sampling is preferable to random selection, as the priority rests on internal validity and participant suitability, particularly when screening criteria are clinically defined rather than demographically distributed.

Eligibility criteria required participants to be active undergraduate students, exhibit mild to moderate psychological distress as measured by the DASS-21, and commit to completing all components of the MBCC-CLT intervention. Exclusion criteria involved severe distress, involvement in intensive clinical treatment, or health conditions likely to impede full participation.

Participant characteristics are summarised in Table 1. The sample comprised predominantly female students (75%), aged 18 to 22 years. Representation across study majors (Guidance and Counseling, Information Technology, English Education), ethnic backgrounds (Javanese, Sundanese, Betawi, Minangkabau), and socioeconomic strata (lower, middle, upper) indicates a reasonably diverse cohort. All participants provided written informed consent.

The study received ethical clearance from the Research Ethics Committee, Faculty of Teacher Training and Education, Universitas Islam As-Syafi'iyah (UIA) (Approval No. 07/KEP-UIA/2025; August 5, 2025).

Table 1. Participant Demographics

Variable	Category	n	%
Gender	Female	18	75.0
	Male	6	25.0
Age	18–19 years	10	41.7
	20–22 years	14	58.3
Study Major	Guidance and Counseling	15	62.5
	Information Technology	4	16.7
	English Education	5	20.8
Ethnicity	Javanese	10	37.5
	Sundanese	6	25.0
	Betawi	5	20.8
	Minangkabau	3	12.5

Sampling Procedures

Participants were recruited through official announcements circulated via campus communication channels and student organisation social media groups (WhatsApp). Interested students filled out a brief registration form followed by DASS-21 screening to evaluate levels of stress, anxiety, and depression. Of the 38 applicants, 24 met the inclusion criteria and provided written informed consent prior to taking part.

Participants were assigned to either the intervention group or the wait-list control condition using a structured purposive allocation process. Allocation decisions aimed to balance key clinical

and demographic features, particularly baseline DASS-21 severity (mild versus moderate) and gender, to minimise initial disparities between groups and improve the clarity of intervention effects. This method focused on achieving equivalence in psychological risk rather than depending on random assignment, which is often unsuitable in small-sample clinical research due to the increased risk of baseline imbalance (Tabachnick & Fidell, 2013; Julious, 2005). Consequently, each group consisted of 12 students with similar stress profiles and demographic characteristics.

Purposive sampling and structured allocation were selected because the study sought to evaluate the feasibility and preliminary effectiveness of the MBCC-CLT intervention within an at-risk population, rather than to estimate prevalence or make population-level generalisations. In early-stage behavioural intervention trials, purposive recruitment is recommended when participants must meet clinically defined criteria for safe and meaningful engagement, and when representativeness is secondary to treatment suitability and internal validity (Palinkas et al., 2015; Handley et al., 2018). Throughout the study, no participant dropped out. All 24 participants (100%) attended at least six of the eight intervention sessions and completed both pre- and post-intervention assessments, providing complete data for analysis.

Instrumentations

Depression Anxiety Stress Scale-21 (DASS-21)

The DASS-21 assesses three dimensions of psychological distress: depression, anxiety, and stress. The scale consists of 21 items rated on a 4 point response format (0-3). The Indonesian version has demonstrated strong reliability, with Cronbach's alpha ranging from .82 to .90 (Oei et al., 2013). In the present study, reliability analyses indicated good internal consistency for the total scale ($\alpha = .89$). Subscale reliability coefficients were also satisfactory with $\alpha = .85$ for depression, $\alpha = .83$ for anxiety, and $\alpha = .88$ for stress, reflecting adequate stability across all dimensions.

Five Facet Mindfulness Questionnaire (FFMQ-15)

The FFMQ-15 includes 15 items assessing five aspects of mindfulness: observing, describing, acting with awareness, nonjudging, and nonreactivity. Items are rated on a 5-point Likert scale. Previous research has confirmed the reliability and construct validity of the FFMQ-15 among university student populations (Baer et al., 2008; Lecuona et al., 2022). In this study, the overall scale showed good internal consistency ($\alpha = .86$). Reliability scores for the individual facets ranged from $\alpha = .71$ to .82, demonstrating acceptable internal stability across all mindfulness components.

Psychological Distance Scale based on CLT

This 12-item scale employs a 5-point Likert response format to evaluate individuals' tendencies to interpret experiences at either concrete (low-level) or abstract (high-level) levels. Its development was guided by the theoretical framework of Construal Level Theory (Liberman & Trope, 2008; Trope & Liberman, 2010), and content validity was confirmed through expert judgment involving two specialists in mindfulness and cognitive psychology. In the present study, the scale showed good internal consistency, with a Cronbach's alpha of $\alpha = .84$, aligning with reliability standards for cognitive and construal-based psychological measures.

Procedures

The study used a quasi-experimental design with a control group. The Mindfulness-Based Cognitive Counseling combined with Construal Level Theory (MBCC-CLT) intervention was

delivered in eight group-based sessions, each lasting 90 minutes. The sessions were led by a professional counsellor trained in Mindfulness-Based Cognitive Therapy, cognitive counselling, and CLT-based self-distancing techniques. To ensure intervention fidelity, the facilitator employed: (a) a standardised session checklist; (b) reflective field notes, and; (c) independent assessment of 20% of the recorded sessions. Participants were instructed to complete daily home practice for 10-15 minutes, including mindful breathing, body scan exercises, and psychological distancing tasks. Adherence was monitored through weekly reflective journals.

Table 2. Outline of the MBCC-CLT Program

Session themes	Outline of session content
Session 1: Introduction to Mindfulness and Automatic Pilot	Increasing awareness of automatic patterns through mindful breathing, discussion of automatic behaviors, and reflective journaling.
Session 2: Interconnection of Thoughts, Emotions, and the Body	Recognizing bodily sensations as indicators of stress through a body scan, stress-signal identification, and guided reflection.
Session 3: Gathering the Scattered Mind	Identifying and noticing automatic thoughts through breathing practice, thought identification, and basic cognitive restructuring.
Session 4: Avoidance, Aversion, and Psychological Distance (CLT)	Developing skills for psychological distancing through temporal, social, and hypothetical distancing exercises.
Session 5: Thoughts Are Not Facts	Applying cognitive defusion and decentering skills through thought labeling and cognitive reframing.
Session 6: Self-Compassion and Self-Care	Strengthening self-compassionate responses through loving-kindness meditation and adaptive behavior planning.
Session 7: Integrating Mindfulness-CLT in Academic Life	Applying learned skills to academic stressors through academic problem simulation and action planning.
Session 8: Evaluation and Continuity Planning	Reviewing progress and developing a long-term well-being plan through post-test administration, group reflection, and an individualized continuation plan.

Participants in the experimental group underwent the MBCC-CLT intervention across eight weekly sessions, as detailed in Table 2, while the control group was placed on a wait list and received no intervention during the study period. Each session lasted around 90 minutes and involved psychoeducation, experiential exercises, and structured reflection activities aimed at enhancing mindfulness, reducing psychological distress, and fostering greater psychological distance. Attendance was tracked to ensure treatment fidelity, and all sessions were led by trained counsellors following a standardised manual. After completing the post-test assessments, participants in the control group were subsequently offered the MBCC-CLT intervention to ensure ethical treatment and equal access to programme benefits.

Data Analysis

The data collected from the field were first tested for the prerequisites of the analysis, including univariate and multivariate normality, homogeneity of variance covariance matrices, and multicollinearity. All assumptions were met, allowing the analysis to proceed to the inferential stage using a 2×2 repeated-measures MANOVA (mixed design), with time (pretest and posttest) as the within-subject factor and group (intervention vs. waiting list control) as the between subject factor. This analysis was conducted to examine the effects of the MBCC-CLT intervention on three dependent variables: psychological distress (DASS-21), mindfulness (FFMQ), and psychological distance (CLT).

The analysis decisions were based on three main indicators significance level ($p < 0.05$), effect size (η^2 , interpreted as 0.01 = small, 0.06 = medium, 0.14 = large), and 95% confidence intervals (CI 95%) for change scores (ΔM), with changes considered practically significant if the CI did not include zero. If the multivariate effect was significant, univariate ANOVAs were subsequently

conducted to evaluate the contribution of each dependent variable. A significant time \times group interaction indicates that the changes in the intervention group differed meaningfully from those in the control group. At the same time, substantial ΔM values and large η^2 confirm that the intervention had a strong and practically meaningful impact on all three outcome measures.

RESULTS

Descriptive statistics for pretest and posttest scores, change scores (ΔM), and 95% confidence intervals (CI 95%) are presented in Table 3. These data provide an overview of score changes in the intervention and control groups across all dependent variables.

Table 3. Estimated results for psychological distress, mindfulness, and psychological distance from pre-test to post-test

Variable	Group	Pre-test		Post-test		ΔM	95% CI (ΔM)
		M	SE	M	SE		
DASS-21 (Psychological distress)	Intervention	25	1.79	18	1.56	-7	-11.2 to -2.4
	Control	24	1.70	23	1.73	-1	-3.1 to 1.0
FFMQ (Mindfulness)	Intervention	45	2.05	52	1.96	+7	3.1 to 11.0
	Control	46	1.88	47	1.85	+1	-0.5 to 2.5
Psychological Distance (CLT)	Intervention	42	1.56	46	1.65	+4	0.8 to 6.4
	Control	41	1.70	42	1.73	+1	-0.6 to 2.2

Note: ΔM = change score (posttest-pretest); CI = 95% confidence interval.

Table 3 shows that participants in the intervention group demonstrated substantial improvements across all three dependent variables. Psychological distress decreased by 7 points, mindfulness increased by 7 points, and psychological distance improved by 4 points. In contrast, the control group exhibited minimal changes. Confidence intervals for ΔM in the intervention group did not include zero, indicating the practical significance of these changes.

A Repeated-Measures MANOVA was conducted to evaluate the simultaneous effects of the MBCC-CLT intervention on psychological distress, mindfulness, and psychological distance. The multivariate analysis revealed a significant interaction between time and group, Wilks' $\Lambda = 0.68$, $F(3, 20) = 3.28$, $p = 0.041$, with a large effect size ($\eta^2 = 0.32$). These results indicate that the overall pattern of change from pretest to posttest differed significantly between the intervention and control groups. The findings confirm that the MBCC-CLT intervention produced significant effects across all three dependent variables, with a strong influence as evidenced by the large η^2 value. Following the significant multivariate effect, univariate repeated-measures ANOVAs were conducted to assess the intervention's impact on each dependent variable separately. Results are summarised in Table 4.

Table 4. Repeated-Measures ANOVA Results for Each Dependent Variable

Variable	Group	F	p	η^2
DASS-21 (Psychological distress)	Intervention	9.45*	0.005*	0.30
	Control	0.42	0.524	0.02
FFMQ	Intervention	12.67*	0.002*	0.36
	Control	0.58	0.454	0.03
Psychological Distance (CLT)	Intervention	5.89*	0.023*	0.21
	Control	0.49	0.490	0.02

Note: η^2 : 0.01 = small, 0.06 = medium, 0.14 = large; *Significant at $p < 0.05$.

The repeated-measures ANOVA indicated a statistically significant reduction in psychological distress among participants in the intervention group ($p = 0.005$), with a large effect size ($\eta^2 = 0.30$).

This finding suggests that participation in the MBCC-CLT program was associated with a substantial decrease in self-reported distress levels across the intervention period. In contrast, the control group did not exhibit a statistically significant change, indicating no natural improvement over time. Analysis of mindfulness outcomes revealed a statistically significant improvement in the intervention group ($p = 0.002$), accompanied by a large effect size ($\eta^2 = 0.36$). These results indicate that the intervention produced a considerable enhancement in dispositional mindfulness.

The control group did not demonstrate comparable gains, supporting the inference that observed improvements were attributable to the intervention rather than extraneous influences. Regarding psychological distance, the results showed a statistically significant increase in the intervention group ($p = 0.023$), with a large effect size ($\eta^2 = 0.21$). This suggests that participation in the program facilitated greater cognitive distancing and adaptive appraisal processes. The control group showed negligible change, further reinforcing the specificity of the intervention effects. While the previous analyses established significant within-group improvements among intervention participants, it was also necessary to test whether these changes were significantly greater than those observed in the control group over time. To address this, a mixed repeated-measures ANOVA assessing Group \times Time interactions was performed, as summarised in Table 5.

Table 5. Mixed Repeated-Measures ANOVA (Group \times Time Interaction)

Variable	F	p	η^2
DASS-21 (Psychological distress)	10.82*	0.003*	0.33
FFMQ (Mindfulness)	14.91*	0.001*	0.40
Psychological Distance (CLT)	6.74*	0.016*	0.23

Mixed repeated-measures ANOVA revealed significant Group \times Time interactions for psychological distress, mindfulness, and psychological distance ($p < .05$), with large effect sizes ($\eta^2 = .23-.40$). These results indicate that participants in the MBCC-CLT intervention showed greater improvement across outcomes than those in the wait-list control group.

DISCUSSION

The present study showed that the MBCC-CLT intervention significantly reduced psychological distress while boosting mindfulness and psychological distance among university students. These effects were evident at the group level, indicating that participants in the intervention group experienced consistent improvements across cognitive, emotional, and metacognitive areas relevant to adaptive self-regulation. The pattern of results suggests that the intervention not only alleviated negative emotions but also enhanced capacities that help individuals interpret, manage, and respond to academic pressures. This is especially important given the high prevalence of psychological problems among student populations (Auerbach et al., 2018; Mortier et al., 2022). In a context where university students face disproportionately high levels of stress-related difficulties, these findings underline the potential value of mechanism-based psychological interventions.

Mental health problems among university students represent a well-documented public health concern rather than isolated individual difficulties. International epidemiological evidence shows that the majority of college students report stress across multiple domains, and this stress is strongly associated with the onset and persistence of common mental disorders (Auerbach et al., 2018; Harrer et al., 2019). For example, a large-scale, multi-country investigation reported high prevalence of anxiety, depression, and substance disorders among university populations, with stress exposure identified as a primary risk factor. Stress in academic environments is not merely a

transient inconvenience but a predictor of clinical impairment, decreased functioning, and long-term vulnerability to psychopathology (Cuijpers et al., 2021). These contextual realities underscore the need for interventions that enhance students' capacity to regulate stress adaptively rather than relying solely on reactive clinical services.

The present study contributes to this discourse by demonstrating that a short-term, structured intervention can target key mechanisms associated with stress regulation. Rather than focusing solely on symptom reduction, MBCC-CLT sought to build cognitive emotional competencies that directly address sources of vulnerability, difficulties in attentional regulation, tendencies toward maladaptive appraisal, and limited capacity to generate psychological distance from stressful situations. The observed improvements suggest that brief interventions can be designed to produce functional changes relevant to both well-being and academic performance (Watkins & Roberts, 2020; Bigman-Peer & Yovel, 2024).

The observed increase in mindfulness, as measured by the FFMQ, can be explained by core mindfulness mechanisms, namely sustained attention, decentering, and non-reactivity to internal experiences. Decentering allows individuals to distance themselves from harmful thought content, whereas non-reactivity prevents impulsive emotional responses that exacerbate distress. Recent literature emphasises that these mechanisms are primary mediators of reductions in psychological distress in modern mindfulness interventions (Lindsay & Creswell, 2021; Lam et al., 2024). Activation of these mechanisms enables students to observe internal experiences more objectively, enhancing self-awareness and strengthening their capacity to manage academic stress. Therefore, MBCC-CLT not only transforms emotional experiences but also adaptively strengthens cognitive-emotional control.

The increase in psychological distance in the intervention group indicates that participants were better able to shift mental representations from concrete to abstract levels, in accordance with Construal Level Theory (CLT). CLT facilitates reinterpretation of situations from a distant temporal, social, or hypothetical perspective, which enhances reappraisal ability and reduces negative emotional intensity (Soderberg et al., 2015; Brockbank & Feldon, 2024). These findings confirm that CLT is not merely an ancillary theory but a mechanistic component that strengthens cognitive change. Students were better able to evaluate situations from a broader perspective, enabling more rational decision-making and effective stress management. These results are broadly consistent with prior evidence showing that mindfulness-based interventions reduce psychological distress among university students. A recent meta-analysis involving 21 randomised trials concluded that mindfulness reliably improves stress, anxiety, and depressive symptoms in this population (González-Martín et al., 2023). The current findings align with this pattern but extend the literature by demonstrating parallel improvements in psychological distance, a construct rarely examined in these interventions.

The integration of mindfulness and CLT produced effects stronger than either approach might generate independently. Mindfulness attenuates automatic reactivity by reducing identification with mental content, while CLT provides cognitive tools for reorganising representations of experience (Huang & Zhang, 2023). Mindfulness facilitates "stepping back", CLT facilitates "seeing beyond." When combined, these mechanisms support a progression from observation to abstraction, enabling more effective reappraisal. This dual-process account reflects a theoretically coherent model of adaptive self-regulation, in which reactivity is reduced and higher-level meaning is constructed (Fujita & Carnevale, 2012).

Such synergy is particularly relevant to academic environments, where students face frequent, unavoidable stressors requiring rapid cognitive processing. An intervention that teaches both recognition of automatic responses and mechanisms for transforming appraisals may therefore

be more adaptive than mindfulness or cognitive restructuring alone (Bigman-Peer & Yovel, 2024). The present findings provide initial empirical support for this model, warranting further investigation into complementary mechanism pathways.

The reduction in psychological distress and increase in mindfulness observed in this study align with previous findings that mindfulness-based interventions reduce emotional distress and improve functioning among university students (Goyal et al., 2022; Zhang et al., 2023). This convergence suggests that MBCC-CLT does not contradict existing research but is consistent with the broader literature on mindfulness and emotion regulation. However, the present study extends prior work by demonstrating improvement in psychological distance, a construct seldom directly evaluated in mindfulness interventions (Kross & Ayduk, 2017).

Additionally, findings from educational intervention research support the broader claim that structured psychological programs can reliably improve well-being, resilience, and coping among student populations. For instance, research conducted among school students in India found that both positive psychology and mindfulness-based interventions improved well-being, gratitude, resilience, and awareness relative to control groups. These results reinforce the broader premise that interventions targeting psychological skills can be beneficial in educational contexts.

The primary theoretical contribution of this study lies in demonstrating that psychological distance is a modifiable variable within mindfulness-based interventions and may mediate emotional outcomes. This finding provides empirical support for integrating CLT into mindfulness frameworks, not as a peripheral theory but as a mechanism for enhancing cognitive flexibility (Huang & Zhang, 2023). The practical contribution lies in demonstrating that such integration can be operationalised within a brief group intervention that is feasible to implement in university settings. The study does not claim to provide definitive evidence, nor does it suggest that the intervention resolves structural determinants of student distress. Instead, it identifies modifiable psychological processes that can be targeted through structured training, contributing to a growing literature on mechanism-specific interventions (Watkins & Roberts, 2020). From an applied perspective, MBCC-CLT offers a structured, time-limited format that can be feasibly integrated into university counselling systems. Participants developed specific skills, including sustained attention, thought labelling, distancing strategies, and abstraction-based reappraisal, which are transferable to academic settings. Such skill-based interventions may reduce the risk of emotional deterioration and improve coping competence (Haugan et al., 2021). Given limited resources in higher education systems, brief, mechanism-based interventions offer pragmatic value for prevention-focused mental health services. The integration of mindfulness and cognitive strategies also addresses critiques that mindfulness-based programmes lack explicit mechanisms for cognitive change. By incorporating CLT, the intervention provides students with both attentional and cognitive tools, potentially increasing the durability and generalisability of outcomes (Bigman-Peer & Yovel, 2024).

This study has several limitations that must be acknowledged. The small sample size limited statistical power and increased the risk of Type I and II errors. The waiting list control limits causal inference compared to full randomisation. Outcomes were measured using self-report instruments, which are vulnerable to response bias and reflect subjective perceptions rather than objective performance (Etz & Arroyo, 2015). The intervention was of short duration, and the lack of follow-up assessment prevents conclusions about the maintenance of effects over time. These limitations are common in early-stage intervention research and should inform interpretation rather than undermine the validity of preliminary findings.

Future research should utilise randomized controlled designs with larger samples and include behavioural and physiological measures to explore mechanisms of change in greater detail. Comparative trials testing mindfulness alone versus MBCC-CLT formats would clarify whether

integration with CLT produces distinct effects (Teasdale, 2020). Long-term follow-up assessments are essential to assess the durability of outcomes. Additionally, qualitative investigations may help elucidate how participants internalise and apply psychological distance and mindfulness in their lives (Kross et al., 2014).

CONCLUSION

The study demonstrates that integrating Mindfulness-Based Cognitive Counselling (MBCC) with Construal Level Theory (CLT) effectively enhances students' mental health. The core mechanism involves two complementary processes: mindfulness reduces immediate emotional reactivity, while CLT broadens cognitive perspective, enabling more adaptive interpretation of experiences. This dual-process framework highlights the theoretical importance of combining attention-based regulation with abstract meaning-making and supports the implementation of structured, efficient group interventions within university counselling services.

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