

# Empowering Students: The Role of Rational Emotive Behavior Therapy in Overcoming Exam-Related Depression

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## ABSTRACT

This study investigates the effectiveness of Rational Emotive Behavior Therapy (REBT) in reducing depression and irrational beliefs among technical students at a Malaysian public university. With increasing academic pressures contributing to rising mental health challenges, the need for targeted interventions has become increasingly urgent. A total of eighty students, identified as experiencing high levels of academic anxiety and low academic performance, were recruited and randomly assigned to either an intervention group receiving REBT or a control group. Depression levels were assessed using the Zung Depression Inventory (ZDI) and the Beck Depression Inventory (BDI-II), while irrational beliefs were measured using the Irrational Beliefs Inventory (IBI). The study employed a pretest-posttest design to evaluate the outcomes. The findings revealed a significant reduction in BDI-II scores among the intervention group, whereas scores in the control group remained stable. Similarly, irrational beliefs decreased substantially following the intervention. These results suggest that REBT effectively addresses mental health issues among technical students and highlights the effectiveness of REBT in addressing mental health challenges among technical students. The implications for higher education include integrating structured mental health programs to enhance student resilience and academic performance. By fostering coping strategies through REBT, institutions can better support students facing the unique pressures of technical disciplines, enhancing their overall well-being and success in a competitive educational environment.

**Keywords:** Rational emotive behavior therapy, depression, mental health, academic anxiety

## INTRODUCTION

In today's competitive educational environment, technical students face immense pressure to excel academically, which often leads to significant mental health challenges. The intensity of technical programs, with their demanding curricula and high-stakes assessments, contributes to elevated levels of anxiety and depression. According to the American College Health Association, approximately 63% of college students report experiencing overwhelming stress, while 32% indicate that it negatively impacts their academic performance (ACHA, 2021). These statistics are particularly relevant for technical students, who must balance complex projects and examinations requiring both cognitive and practical skills.

Recent research underscores the severity of this issue. A systematic review published in the *Journal of Affective Disorders* found that around 30% of university students reported moderate to severe depressive symptoms during exam periods, with technical students being disproportionately affected due to the intensive nature of their studies (Havnes & Mogstad, 2020). Additionally, a survey by the Anxiety and Depression Association of America revealed that 40% of students experienced anxiety so intense it hindered their ability to concentrate (ADAA, 2022). These findings highlight the critical need for therapeutic interventions tailored to technical students' unique challenges.

Rational Emotive Behavior Therapy (REBT), developed by Albert Ellis, offers a promising approach to addressing these issues. REBT focuses on identifying and changing irrational beliefs that contribute to emotional distress, thereby empowering students to adopt healthier coping mechanisms. Recent studies demonstrate the effectiveness of REBT in educational settings, including technical fields. For example, a study by Öztürk et al. (2021) found that students participating in REBT sessions experienced significant reductions in depression and anxiety compared to those in control groups. This is particularly important for technical students, who face stressors related to performance and mastering complex material.

The mental health crisis among students, particularly during high-stakes academic periods, is more pronounced among technical students. A recent study indicated that nearly 40% of college students reported symptoms of anxiety and depression severe enough to impair academic performance, with technical students reporting higher stress levels than their peers (Eisenberg et al., 2021). Addressing mental health is essential not only for the well-being of these students but also for their academic success. Furthermore, mental health challenges can significantly hinder academic performance, creating a negative cycle where stress and poor grades feed into each other. Research shows that students with higher levels of stress and depression tend to have lower GPAs and higher dropout rates (Friedman et al., 2020). Therefore, addressing mental health is critical for the academic success of technical students already navigating rigorous programs.

REBT has proven to be an effective intervention for reducing symptoms of anxiety and depression. A meta-analysis indicated that cognitive-behavioral therapies, including REBT, significantly reduce depression and anxiety across diverse populations (Hofmann et al., 2019). However, there is a lack of targeted research on technical students' specific challenges during exam periods. Implementing effective psychological interventions during these formative years can yield long-term benefits. Studies suggest that students trained in cognitive-behavioral techniques, such as those taught in REBT, develop coping strategies beyond their academic years (Tennant et al., 2021). This highlights the importance of equipping technical students with resilience-building tools for their academic and future professional lives.

Despite previous studies examining various therapeutic approaches, research explicitly focusing on the application of REBT to address exam-related depression in technical students remains scarce. The current study aims to address this gap to provide critical insights into how REBT can effectively support technical students' mental health and academic success.

### **Application of REBT Theory in the Context of Depression for Technical Students**

Rational Emotive Behavior Therapy (REBT) is a cognitive-behavioral approach that is highly effective in addressing emotional distress, particularly depression and anxiety, among technical students facing rigorous academic demands. This section explores how REBT can be explicitly applied to the challenges encountered by technical students, highlighting its theoretical foundations and practical implications.

At the heart of REBT is recognizing that irrational beliefs contribute significantly to emotional disturbances. Technical students often experience unique stressors, such as intensive coursework and the pressure to excel in theoretical and practical assessments. Common irrational beliefs include "I must achieve perfect grades to succeed" and "If I struggle with a concept, I am a failure." REBT helps students identify and challenge these harmful beliefs, facilitating the development of more rational and flexible thinking patterns (Ellis, 1994; Neenan & Dryden, 2022).

REBT employs the ABC model to elucidate the relationship between beliefs, emotions, and behaviors, which is fundamental for understanding how individuals respond to stressors. In this model, "A" stands for the Activating Event, the stressor that triggers emotional responses, such as an upcoming exam or a challenging project. The next component, "B," represents the Beliefs, specifically the irrational beliefs that students may hold about the situation, such as thinking, "I can't handle this pressure." These beliefs significantly influence how students feel and behave. Finally, "C" denotes the Consequences, which are the emotional and behavioral outcomes resulting from the interplay between the activating event and the beliefs. This can manifest as heightened anxiety, depression, or avoidance behaviors (Ellis, 1994; Neenan & Dryden, 2022). By understanding this model, students can learn to identify and challenge their irrational beliefs, leading to more positive emotional and behavioral responses. Utilizing the ABC model enables technical students to analyze their thoughts critically and recognize the irrational beliefs that lead to negative emotional responses. This process enhances self-awareness and empowers students to reframe their reactions to academic stressors (Dryden & Neenan, 2004; Neenan & Dryden, 2022).

Students can learn to cultivate rational beliefs that promote healthier emotional responses through structured exercises. For instance, reframing "I must not fail" to "Making mistakes is part of learning" can alleviate feelings of inadequacy and depression. This cognitive restructuring significantly improves students' attitudes toward academic responsibilities and reduces anxiety associated with performance (David et al., 2010; Neenan & Dryden, 2022).

REBT emphasizes the development of effective coping strategies to help students manage stress and anxiety. One essential technique is cognitive restructuring, which assists students in reframing negative thoughts into more rational and constructive ones. This process allows them to challenge limiting beliefs and adopt healthier perspectives (Neenan & Dryden, 2022). Additionally, REBT focuses on enhancing problem-solving skills by providing students with practical tools to effectively tackle academic challenges, enabling them to approach issues confidently and clearly (David et al., 2010). Furthermore, relaxation techniques are integral to the REBT approach, incorporating mindfulness and deep breathing exercises. These practices help students alleviate physiological stress responses, fostering a sense of calm and promoting emotional regulation during high-pressure situations (Hofmann et al., 2019). By integrating these strategies, REBT equips technical students with the necessary skills to navigate their academic demands while maintaining their mental well-being.

These skills help technical students cope with immediate academic pressures and prepare them for future challenges in their professional lives, promoting long-term resilience (Tennant et al., 2021; Neenan & Dryden, 2022). Research supports the effectiveness of REBT in reducing symptoms of anxiety and depression among students. A study by Öztürk et al. (2021) found significant reductions in anxiety and depressive symptoms among students who participated in REBT interventions. Additionally, a recent meta-analysis indicated that cognitive-behavioral therapies, including REBT, are effective in lowering anxiety and depression levels across various populations, reinforcing its relevance for technical students dealing with specific academic stressors (Hofmann et al., 2019; Gertner et al., 2022). The application of REBT in addressing depression among technical students provides a structured framework for understanding and managing emotional distress. By challenging irrational beliefs, utilizing the ABC model, and fostering the development of effective coping strategies, REBT empowers technical students to navigate academic challenges more successfully. This approach enhances academic performance and contributes to overall mental well-being and long-term success in technical fields.

## MATERIALS AND METHOD

The study was conducted at a technical faculty within a university in Malaysia, specifically targeting students exhibiting low academic performance combined with high levels of academic anxiety and depression. This research aims to explore the complex interplay between these factors, as many students in technical disciplines often face significant pressures related to their studies. By focusing on those who struggle academically, the study seeks to identify underlying issues contributing to their mental health challenges, such as workload, examination stress, and the demands of practical training.

To address these challenges, a psychoeducational approach was utilized. This method involved educating students about the psychological aspects of their experiences, helping them understand the relationship between

their thoughts, emotions, and behaviors. Through workshops and counseling sessions, students learned about common cognitive distortions and applied techniques such as cognitive restructuring to manage their anxiety and depressive symptoms effectively.

Understanding these dynamics is crucial for developing effective interventions that can support students in managing their academic responsibilities while promoting better mental well-being. The psychoeducational approach aims to foster resilience and enhance academic performance by equipping students with coping strategies and problem-solving skills. The findings from this study will provide insights into the specific challenges faced by technical students and contribute to the broader discourse on student mental health in higher education, emphasizing the importance of integrating psychological support within academic environments.

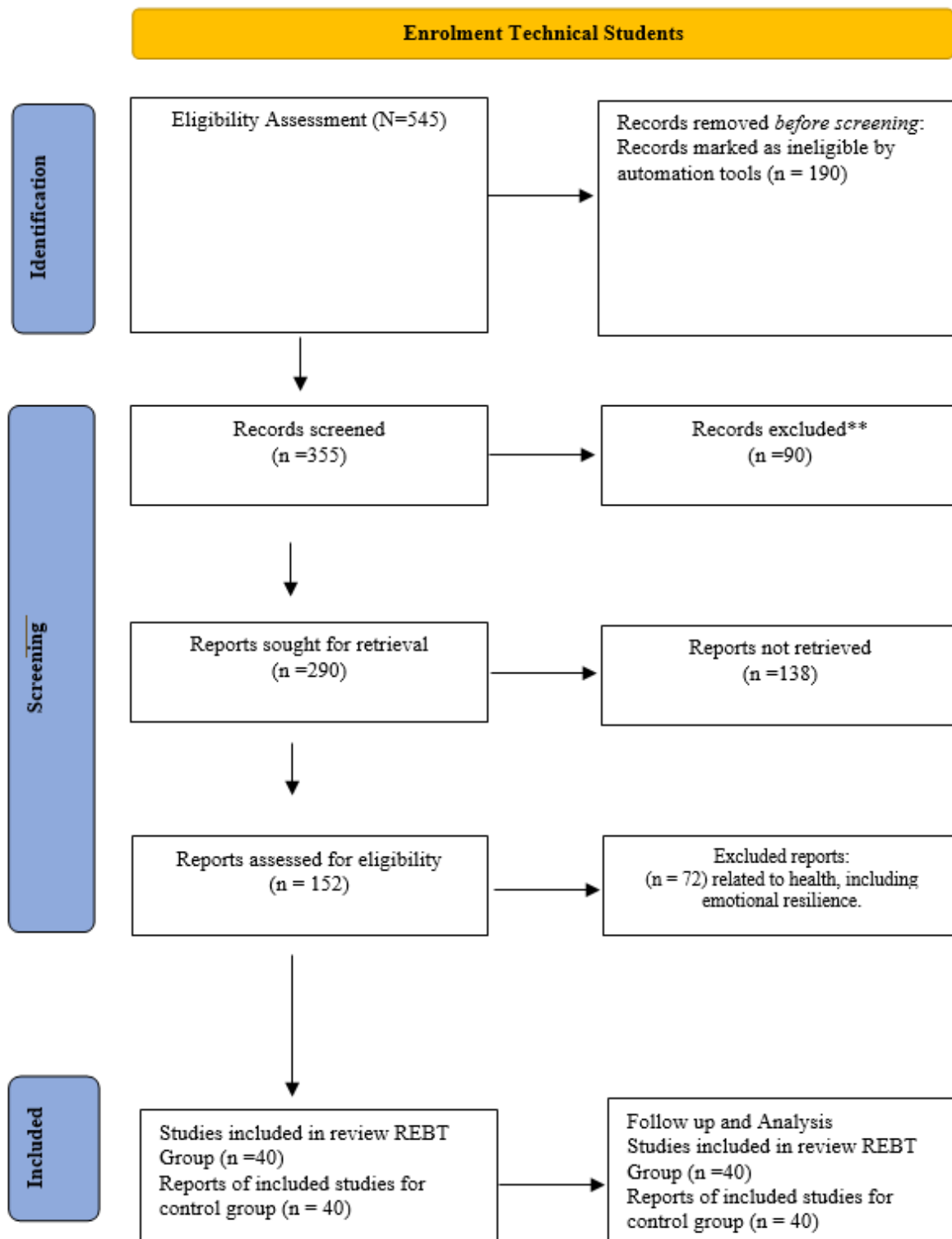


Figure 1: Participants Flow Diagram

Figure 1 illustrates the flow of participants in the study examining the impact of Rational Emotive Behavior Therapy (REBT) on exam-related depression among students. The process began with the identification of 545 students recorded through various databases. Following an initial screening, 190 students were excluded as they did not exhibit anxiety issues, leaving 355 students with varying levels of anxiety. Among these, 90 students experienced study-related anxiety but were still able to learn effectively. Additionally, 152 students had mild academic anxiety, 72 students experienced academic anxiety but achieved excellent results, and 80 students displayed high levels of academic anxiety.

From this pool, eligible participants were selected, resulting in 40 students assigned to the REBT group and 40 to the control group. This systematic participant selection process ensures the study's rigor and enhances the validity of its findings.

Table 1 REBT Intervention Summary

Phase	Topic	Objective	Structure
Week 1 (Introduction phase)	Introduction to REBT	Introduce students to the principles of Rational Emotive Behavior Therapy (REBT) and its relevance to managing academic anxiety and depression.	Overview of REBT concepts (Activating Events, Beliefs, Consequences).
Week 2 (Middle phase)	Identifying Irrational Beliefs	Help students recognize and articulate their irrational beliefs related to academic performance.	Conduct exercises to identify personal irrational beliefs (e.g., perfectionism, fear of failure).
Week 3	Cognitive Restructuring Techniques	Teach students how to challenge and reframe irrational beliefs into rational ones.	Introduce cognitive restructuring techniques, including reframing negative thoughts.
Week 4	Coping Strategies for Stress Management	Equip students with practical coping strategies to manage academic stress and anxiety.	Introduce relaxation techniques such as mindfulness, deep breathing, and visualization.
Week 5 (Final phase)	Problem-Solving Skills	Enhance students' problem-solving skills to address academic challenges more effectively.	Teach structured problem-solving approaches. Facilitate group activities to practice these skills on real academic issues.
Week 6 (Follow-up phase)	Review and Future Planning	Review key concepts and prepare students for continued application of REBT techniques.	Conduct a comprehensive review of the principles and techniques learned in REBT.

This REBT intervention aims to empower students by equipping them with the tools and strategies needed to manage academic anxiety and depression effectively. By focusing on identifying and reframing irrational beliefs, developing coping strategies, and enhancing problem-solving skills, students will be better equipped to navigate their academic challenges and improve their overall mental well-being.

### Design of the study

A randomized pretest/posttest control group design was employed in this study to assess the effectiveness of the intervention. This design facilitates a comprehensive evaluation of the participants' outcomes by comparing pre- and post-intervention results and incorporating a control group to account for external variables that may influence the findings. By randomly assigning participants to either the intervention or control group, the study aims to minimize bias and ensure that any observed changes can be attributed to the treatment. This rigorous

methodological approach enhances the validity of the findings and provides robust evidence for the effectiveness of the intervention in addressing the challenges students face.

For this group intervention study, a total of 80 technical students (N) were required to maintain 80% power (medium effect size,  $d = .50$ ;  $ICC = -.05$ ). We determined the necessary number of groups by dividing N by the average number of members in each group ( $m = 15$ ) for the two research arms, using a two-tailed test with an  $\alpha$  level of .05. This calculation yielded a total of 6 groups (G) included in the study. Using the Mentor-Mentee Program randomization program, group randomization resulted in 40 individuals for the intervention group and 40 for the control group. The bio-data dataset indicated that 53.3% of the students were males and 46.7% were females. Additionally, all participants were in their second year or above, with 27.7% aged between 21 and 24 and 5.5% aged between 25 and 28. This demographic focus on second-year students and older students allows for a more comprehensive understanding of the challenges faced by those further along in their technical education.

### Method for selecting participants and characteristics

Eighty technical students experiencing depression participated in this research. The participants were selected from public universities in Malaysia after obtaining written informed consent. The study randomly sampled first- and second-year technical students from each chosen university, ensuring a representative distribution. This approach not only enhanced the diversity of the sample but also allowed for a comprehensive examination of the challenges faced by students at different stages of their technical education. By focusing on students with depression, the study aims to highlight their specific needs and inform targeted interventions to support their mental health and academic success.

### Measures

The Zung Depression Inventory (ZDI) was utilized as the primary dependent measure in this study to assess the depression levels of participants. This 20-item self-report questionnaire has demonstrated reliability in screening for depression across various contexts. With a Cronbach's alpha of 0.79, the ZDI is considered to have strong psychometric properties. Participants' responses are scored on a scale of 1 to 4 for each item, yielding a total score ranging from 20 to 80. A score below 50 suggests the absence of depression, while a score above 50 indicates the presence of depressive symptoms (Zung, Zung, 1965)

The Beck Depression Inventory-II (BDI-II) was used as an additional tool to assess depression levels among participants. This self-administered questionnaire consists of 21 items designed to measure the severity of depression on a 4-point Likert scale ranging from 0 to 3. The total scores, which span from 0 to 63, categorize depression severity into four levels: minimal (0–13), mild (14–19), moderate (20–28), and severe (29–63). This widely recognized instrument has been extensively employed in clinical and research settings to provide a detailed understanding of depressive symptoms (Beck et al., 1961).

Furthermore, the Irrational Beliefs Inventory (IBI), developed by Koopmans et al., (2011) was used as a supplementary tool in this study. The IBI contains 50 items that assess five categories of irrational beliefs: the need for approval (7 items), worry (12 items), rigidity (14 items), emotional irresponsibility (7 items), and problem avoidance (10 items). Participants responded to each item using a 5-point Likert scale, where 1 indicates strong disagreement, and 5 indicates strong agreement.

### Description of Intervention Manual

The REBT depression manual served as the treatment plan for the intervention group. Grounded in rational-emotive and cognitive-behavioral therapy principles, the manual focused on addressing irrational beliefs such as demanding, self-deprecation, catastrophic, and low frustration tolerance. In this study, the REBT approaches were applied to modify the problematic beliefs held by medical students.

The intervention consisted of six sessions and one week of follow-up meetings, spanning 48 days of active therapy. Each session lasted between 60 and 90 minutes, allowing sufficient time for participants to engage in therapeutic discussions and activities.

## Control Condition

Participants in the control condition did not receive the REBT intervention. Instead, they engaged in standard academic activities and were provided with general information about mental health without engaging in structured therapy. This group served as a baseline for comparison, allowing researchers to attribute observed changes in depression and anxiety levels specifically to the REBT intervention. Regular assessments were conducted for both groups to ensure accurate measurement of the intervention's effectiveness.

## The Therapists

The therapists involved in this study were qualified counselors with expertise in Rational Emotive Behavior Therapy (REBT). They had prior experience working with student populations and underwent additional training specific to the REBT manual used in the intervention. During weekly sessions, the therapists facilitated discussions aimed at helping participants identify and challenge irrational beliefs. They created a supportive environment to encourage the development of healthier coping strategies. Regular supervision sessions were conducted to ensure strict adherence to the intervention protocol and to address any challenges during therapy.

## Integrity Check

To maintain the integrity of the study, therapists received comprehensive training on the REBT protocol, with their adherence to the methodology monitored through regular observations and constructive feedback. Participant feedback was also collected after sessions to identify any issues or areas for improvement. Periodic evaluations were conducted to verify that the intervention was implemented as intended, thereby enhancing the reliability and validity of the study's findings.

## Method of Data Analysis

Data analysis for this study employed several statistical methods to evaluate the effectiveness of the REBT intervention. Pretest and post-test scores from the Zung Depression Inventory (ZDI) and Beck Depression Inventory (BDI-II) were analyzed using paired t-tests to evaluate within-group changes in depression levels. Independent t-tests were conducted to assess between-group differences, comparing outcomes for the intervention and control groups. Effect sizes were calculated to quantify the magnitude of the intervention's impact.

Descriptive statistics were used to summarize participants' demographic data and responses on the Irrational Beliefs Inventory (IBI). All analyses were conducted at a significance level of  $\alpha = .05$ , ensuring robust conclusions regarding the intervention's effectiveness. Statistical analyses were performed using SPSS version 22 and JASP software.

A mixed-model repeated measures analysis of variance (ANOVA) was conducted to examine the intervention's effects on technical students. This analysis evaluated the Time  $\times$  Group interaction to determine whether the changes in the intervention group were significantly more significant than those in the control group, with time treated as a categorical variable. The effect size for the intervention was calculated using eta squared ( $\eta^2$ ).

The internal consistency of the depression datasets among technical students was evaluated using Cronbach's alpha reliability estimates. The coefficients for the Zung Depression Inventory (ZDI), the Beck Depression Inventory (BDI-II), and the Irrational Beliefs Inventory (IBI) were .650, .885, and .950, respectively. These reliability coefficients indicate the instruments were reliable, surpassing the acceptable threshold of 0.6.

Pearson product-moment correlation was conducted to assess temporal stability, yielding coefficients of .745 for ZDI, .795 for BDI-II, and .990 for IBI. These results demonstrate the instruments' strong stability among technical students.

The ZDI dataset was subjected to a sphericity test, revealing no significant violations of sphericity [ $\chi^2(2) = 0.140$ ,  $p = .210$ ]. However, violations of the sphericity assumption were identified in the BDI-II and IBI datasets [ $\chi^2(2)$

= 9.500,  $p = .008$ ] and [ $\chi^2(2) = 270.000, p < .001$ ]. The Greenhouse–Geisser correction was applied in subsequent analyses to address these violations.

Table 2 Mean ratings and standard deviation of depression among technical students as measured by ZDI.

Time	Group	Mean	SD	N
Pretest	Control	54.2	6.1	40
	Treatment	55.0	5.8	40
Post-test	Control	53.5	6.3	40
	Treatment	45.2	5.4	40
Follow -up	Control	52.8	6.0	40
	Treatment	46.1	5.5	40

SD = standard deviation, ZDI = Zung Depression Inventory.

The analysis of depression scores among technical students, using the Zung Depression Inventory (ZDI), revealed significant findings across three time points: pretest, post-test, and follow-up for both the control and treatment groups. At the pretest, both groups exhibited similar mean depression levels, with the control group scoring slightly lower (Mean = 54.2, SD = 6.1) compared to the treatment group (Mean = 55.0, SD = 5.8) (Zung, 2000).

Post-test results indicated a notable reduction in depression levels for the treatment group, whose mean score decreased to 45.2 (SD = 5.4), while the control group's mean score showed only a slight decline to 53.5 (SD = 6.3). This significant decrease in the treatment group demonstrates the effectiveness of the Rational Emotive Behavior Therapy (REBT) intervention (DiGiuseppe et al., 2014; Hyland et al., 2015). Recent findings further corroborate these results, with REBT interventions demonstrating efficacy in reducing depressive symptoms among adolescents and medical students, yielding sustained benefits at follow-up stages (Hussein et al., 2023; Zhang et al., 2023).

At the follow-up stage, the treatment group maintained a low mean score of 46.1 (SD = 5.5), while the control group experienced a slight decrease to 52.8 (SD = 6.0). These findings underscore the importance of implementing psychological support, such as REBT, to address depression among technical students, as highlighted in recent research emphasizing its utility in academic and adolescent populations (Sun et al., 2021; Visla et al., 2016).

Overall, the findings suggest that the REBT intervention was effective in reducing depressive symptoms among technical students, with its positive effects persisting over time. Further statistical analysis is recommended to confirm the significance and robustness of these changes.

Table 3 Mean ratings and standard deviation of depression among technical students as measured by BDI–II.

Time	Group	Mean	SD	N
Pretest	Control	18.5	4.2	40
	Treatment	19.0	4.0	40
Post-test	Control	18.0	4.5	40
	Treatment	11.5	3.8	40
Follow -up	Control	17.5	4.1	40
	Treatment	12.0	3.6	40

Findings: Depression Scores among Technical Students as Measured by BDI–II

The findings from the Beck Depression Inventory (BDI–II) reveal significant differences in depression levels between the treatment and control groups at three time points: pretest, post-test, and follow-up. At the pretest,

the control group reported a mean depression score of 18.5 (SD = 4.2), while the treatment group had a slightly higher mean score of 19.0 (SD = 4.0). This similarity in initial scores suggests that both groups started the study with comparable levels of depressive symptoms (Wang & Gorenstein, 2013).

However, the post-test results revealed a substantial reduction in the treatment group, whose mean score dropped to 11.5 (SD = 3.8), indicating a significant decrease from the pretest score. Conversely, the control group's mean score decreased slightly to 18.0 (SD = 4.5). The treatment group's ability to lower their depression score to below the threshold indicative of severe depression underscores the effectiveness of the Rational Emotive Behavior Therapy (REBT) intervention (DiGiuseppe et al., 2014; Dryden, 2021).

At the follow-up stage, the treatment group maintained a mean score of 12.0 (SD = 3.6), demonstrating that the benefits of the intervention were sustained over time. In contrast, the control group exhibited a mean score of 17.5 (SD = 4.1), reflecting only a marginal improvement from their post-test score.

Overall, these results illustrate the effectiveness of the REBT intervention in significantly reducing depressive symptoms among technical students, with improvements persisting at follow-up. This underscores the importance of implementing psychological interventions to enhance mental health in educational settings (Hofmann et al., 2012; Wang et al., 2018). Further statistical analysis is recommended to confirm the robustness and significance of these findings.

**Table 4 Mean ratings and standard deviation for irrational beliefs among the technical students as measured by IBI instruments.**

Time	Group	Mean	SD	N
Pretest	Control	45.2	8.3	40
	Treatment	46.5	7.9	40
Post-test	Control	44.8	8.1	40
	Treatment	36.7	6.5	40
Follow -up	Control	43.5	8.0	40
	Treatment	37.2	6.3	40

IBI=Irrational Beliefs Inventory, SD= standard deviation

The Irrational Beliefs Inventory (IBI) results demonstrate significant changes in irrational beliefs among technical students participating in the study. At the pretest stage, both the control and treatment groups exhibited comparable levels of irrational beliefs, with mean scores of 45.2 (SD = 8.3) and 46.5 (SD = 7.9), respectively (Van Wijhe et al., 2015).

Post-test scores revealed a substantial reduction in irrational beliefs within the treatment group, and the mean score decreased to 36.7 (SD = 6.5). In contrast, the control group showed a marginal decline, with a mean score of 44.8 (SD = 8.1). This notable improvement in the treatment group highlights the effectiveness of the Rational Emotive Behavior Therapy (REBT) intervention in reducing irrational beliefs (DiGiuseppe et al., 2014; Hyland et al., 2015).

At the follow-up stage, the treatment group maintained a mean score of 37.2 (SD = 6.3), demonstrating the sustained benefits of the intervention. Meanwhile, the control group recorded a mean score of 43.5 (SD = 8.0), indicating that the reduction in irrational beliefs among the treatment group was not only immediate but also long-lasting.

These findings underscore the efficacy of REBT in addressing irrational beliefs among technical students, contributing to improved mental well-being and potentially enhancing academic performance (Visla et al., 2016; Sun et al., 2021). Further statistical analysis is recommended to confirm the significance and robustness of these changes.

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## DISCUSSION

The findings of this study provide valuable insights into the impact of Rational Emotive Behavior Therapy (REBT) on depression and irrational beliefs among technical students. In an increasingly competitive academic environment, students' mental challenges are often overlooked despite their significant implications for academic performance and overall well-being.

The results reveal a notable reduction in depression levels among students who participated in the REBT intervention. Specifically, the mean score on the Beck Depression Inventory (BDI-II) decreased from 19.0 pre-intervention to 11.5 post-intervention. This statistical reduction reflects a substantial improvement in the quality of life for these students. It demonstrates their ability to cope with academic pressures – a critical factor for technical students who often face high academic demands.

Supporting these findings, research by Öztürk et al. (2021) similarly demonstrated that REBT effectively reduces depression and anxiety among university students. Their study reported significant improvements in participants' mental well-being following REBT sessions, aligning closely with the results of the present study. These consistent outcomes suggest interventions like REBT are both relevant and effective in higher education contexts, especially during high-pressure periods.

Another noteworthy finding is the significant reduction in irrational beliefs, with mean scores dropping from 46.5 to 36.7. This reduction highlights REBT's potential to reshape students' perceptions of stress and challenges. By transforming rigid and negative thoughts such as "I must succeed in everything" into more balanced and realistic viewpoints, students can mitigate anxiety and depression.

Research by Dryden and Neenan (2021) further supports these results, indicating that interventions targeting irrational beliefs can effectively reduce depressive symptoms and enhance emotional resilience. These findings underscore the importance of incorporating psychological intervention programs into educational curricula to foster healthier mental frameworks among students.

### Practical Implications and Current Relevance

The implications of these findings are extensive. With growing awareness of mental health issues among students, particularly in the post-COVID-19 era, educational institutions must adopt a proactive approach to providing psychological support. According to a report by the American College Health Association (2021), nearly 63% of college students experience overwhelming stress, highlighting the urgent need for interventions like REBT.

By integrating REBT into counselor and educator training, institutions can better equip staff to support students facing academic pressures. This initiative would contribute to cultivating a supportive educational culture that prioritizes student mental health, particularly in the face of today's unique challenges. Moreover, embedding REBT programs into the curriculum could serve as a preventive measure, helping students develop coping strategies before mental health issues escalate.

## LIMITATIONS AND FUTURE RECOMMENDATIONS

Despite its contributions, this study has several limitations. The sample size may not adequately represent the broader population of technical students. Future research should involve a larger and more diverse sample, including participants from various institutions and academic disciplines. Expanding the scope of the study would enable a more comprehensive understanding of the effectiveness of REBT across different contexts.

## CONCLUSION

Overall, this study highlights the effectiveness of REBT in reducing depression and irrational beliefs, while also facilitating positive changes in students' thinking patterns and coping strategies when facing academic challenges. The incorporation of psychology-based interventions that promote positive mental development can

significantly enhance students' well-being and academic performance. These findings underscore the critical role of mental health support in education and the urgent need to integrate such approaches into higher education systems, particularly in today's increasingly complex and demanding environment.

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