The Effectiveness of Group Counseling with the Rational Emotive Behavior Therapy (REBT) Approach to Reduce Students' Anxiety in Facing College Entrance Exams

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Abstract: This study aims to test the effectiveness of group counseling services using the Rational Emotive Behavior Therapy (REBT) approach in reducing students' anxiety facing college entrance exams. This study uses a quantitative approach with a quasi-experimental design with a pretest-posttest control group design. The subjects were 14 students of grade XII of SMA Pertiwi 1 Padang who had moderate to high levels of anxiety based on the initial measurement results. Data were collected using the College Entrance Exam Anxiety Scale developed to cover three main dimensions: emotional, cognitive, and physiological anxiety. This scale consists of 37 valid statements with a Cronbach's Alpha reliability value of 0.93, indicating a very high level of reliability. Data analysis was performed using the Wilcoxon Signed Rank Test and the Kolmogorov-Smirnov 2 Independent Samples Test with the help of SPSS version 26.0. The results showed a Z value = -2.36 and p = 0.01 (p < 0.05) in the experimental group, which means there was a significant difference between the anxiety levels before and after treatment. Meanwhile, there were no significant differences in the control group. These results demonstrate that group counseling services using the REBT approach are effective in reducing student anxiety, particularly in the emotional, cognitive, and physiological aspects. This approach helps students think more rationally, manage their emotions, and reduce physical symptoms of anxiety leading up to college entrance exams.

Keywords: Anxiety; Calhoun & Acocella; Group counselling; High school students; REBT

Introduction

College entrance exams are a crucial phase in a student's educational journey, causing high psychological stress as they determine their academic future. At this stage, students are required not only to be academically prepared but also to be able to manage emotional pressure and high levels of environmental expectations (Alanazi et al., 2023; Olivera et al., 2023). Failure to manage this pressure often leads to symptoms of academic anxiety, such as nervousness, difficulty concentrating, sleep disturbances, and excessive physiological tension (Chinvararak et al., 2025; Yu et al., 2024). If left untreated, these conditions can reduce students' academic performance and self-confidence in facing the highly competitive college entrance exams (Ma & Chen, 2024). According to Yarkwah et al. (2024) and Jerrim (2023), test anxiety is a psychological condition characterized by feelings of tension and worry about the possibility of academic failure. Contributing factors include academic demands, parental expectations, previous experiences of failure, and irrational thinking about success and failure. High levels

of anxiety directly impact students' cognitive function and learning behavior, hindering their ability to think clearly and reducing their motivation to achieve (Lo et al., 2022; Lemos et al. (2025). This finding is supported by a preliminary study conducted at SMA Pertiwi 1 Padang, which found that 80% of 12th-grade students experienced moderate to high levels of anxiety leading up to college entrance exams. This phenomenon indicates that test anxiety has become a serious issue requiring scientifically based psychological intervention. One effective approach to addressing this problem is Rational Emotive Behavior Therapy (REBT).

Introduced by Albert Ellis, REBT emphasizes that negative emotions such as anxiety are not caused by external events, but by an individual's irrational beliefs about those events (Mahfar et al., 2019; Turner et al., 2025). This approach helps students recognize and replace irrational thoughts such as "I must graduate from my favorite university" or "failure means I'm worthless" with more adaptive, rational thought patterns. This way, students learn to manage stress more calmly and realistically (Sercekman, 2024; LeBlanc & Posner, 2022). In an educational context, implementing REBT-based group counseling is a strategic choice because it combines the power of cognitive therapy with the dynamics of social support within a group (Baljé et al., 2024). Group counseling allows students to share experiences, receive positive feedback, and learn together to challenge irrational thoughts. Research by Hamdani et al. (2022), demonstrated that group counseling services effectively reduce anxiety levels in the face of Computer-Based Written Exams (UTBK). Similar research by Calderone et al. (2025), also showed that relaxation techniques in group counseling significantly reduced physiological symptoms of anxiety, while Song et al. (2024), found that group music therapy can improve students' emotional balance before exams.

A study by Liu et al. (2025), found that significant academic stress among students in public high schools in Padang City was found, indicating that academic pressure significantly impacts their psychological health. These findings support the urgency of interventions such as group counseling with an REBT approach to reduce academic anxiety. In her study "Counselor Readiness in a Successful Counseling Process," Dina Sukma emphasized that counselor readiness—including theoretical understanding and professional integrity—is a key factor in ensuring effective counseling interventions and positive psychological outcomes (Bowman & Turner, 2022). This demonstrates that counselor quality and readiness are crucial for the success of REBT-based group counseling services. Furthermore, research conducted by Saulius & Malinauskas (2023) in their article "Guidance and Counseling Services for Reducing Youth Private Social Anxiety" demonstrated that guidance and counseling services play a significant role in reducing adolescent social anxiety. This research reinforces the idea that appropriate counseling approaches, including REBT, can help individuals overcome anxiety and improve social adaptation.

Foreign research also supports the effectiveness of this approach. According to Onwumere et al. (2025), an REBT intervention program in high schools in the United States reduced academic anxiety by 35% and increased students' self-efficacy for national exams. Similar findings were also revealed by Fitri et al. (2024), who stated that integrating REBT into group counseling services can develop emotional regulation skills and reduce negative thoughts about academic performance. Thus, REBT is not only effective in addressing short-term anxiety but also fosters long-term rational thinking skills. In Indonesia, guidance and counseling services in schools generally focus on providing information and motivation without a systematic psychotherapeutic approach. Guidance and counseling teachers rarely use the REBT approach in a structured manner due to limited training and resources. Yet, students face various complex academic pressures, especially during the transition to higher education. Therefore, implementing group counseling services with the REBT approach is highly relevant to help students change irrational thought patterns, reduce anxiety, and improve mental readiness for college entrance exams.

Based on this description, this study aims to measure the effectiveness of group counseling with the REBT approach in reducing student anxiety facing college entrance exams. The results of this study are expected to provide theoretical contributions to the development of a cognitive-emotional counseling service model in schools, as well as practical implications for guidance and counseling teachers in helping students manage their academic anxiety adaptively.

Method

Research Design

This study used a quantitative approach with a quasi-experimental design using a pretest-posttest control group design. This design was chosen to test the effectiveness of group counseling services using the Rational Emotive Behavior Therapy (REBT) approach on reducing students' anxiety during college entrance exams. According to Goldfarb et al. (2022), a quasi-experimental design is used when researchers cannot fully control external variables but still want to measurably assess the effect of the treatment on the subjects. This design allows researchers to compare

anxiety scores between the experimental group receiving REBT group counseling services and the control group receiving no similar treatment.

Table 1. Research design

Experimental Group	Pretest	Treatment	Posttest
Control Group	O_1	X1 (Group Counseling REBT)	O2
Experimental Group	O3	X2 (not given treatment)	O4

Note:
O1: Pretest in the experimental group
O3: Pretest in the control group
O2: Posttest in the experimental group
O4: Posttest in the control group
X1: Rebt group counseling
X2: No treatment

Population and Sample

The population of this study was all 12th-grade students at SMA Pertiwi 1 Padang in the even semester of the 2024/2025 academic year. Based on the results of a preliminary study using an exam anxiety questionnaire, 80% of students experienced moderate to high anxiety prior to the college entrance exam. The sample was selected using a purposive sampling technique, with the criteria being students with above-average anxiety scores. From the selection results, 14 students were selected for the study, consisting of 7 students in the experimental group and 7 students in the control group. According to Ahmed (2024), purposive sampling is appropriate when researchers require subjects with specific characteristics relevant to the research objectives.

Research Instrument

The main instrument used was the College Entrance Exam Anxiety Scale, developed based on the theory of Calhoum and Acocella (1990) in Cioffi et al. (2024). It encompasses three main dimensions: Emotional Reactions, related to feelings of tension, fear of failure, and worry when facing exams; Cognitive Reactions, including difficulty concentrating, negative thoughts, and inability to remember material; Physiological reactions, in the form of bodily symptoms such as heart palpitations, trembling hands, or sleep disturbances. The scale consists of 37 valid statements with five answer alternatives using a Likert scale (1–5). The instrument was piloted on 35 students at SMA Pertiwi 1 Padang, and analysis results showed 37 valid items with a correlation coefficient of 0.33–0.78 ($p < 0.05$) and a Cronbach's Alpha reliability value of 0.93, indicating high reliability. These results indicate that the instrument is suitable for consistently measuring students' anxiety levels facing college entrance exams.

Data Analysis Techniques

Data analysis used the non-parametric Wilcoxon Signed Rank Test to determine differences in anxiety levels before and after treatment in the experimental group, and the Kolmogorov-Smirnov Independent Samples Test to compare the results of the experimental and control groups. The analysis results showed a significant difference in anxiety levels between before and after treatment with a Z value of -2.36 and p = 0.01 ($p < 0.05$) in the experimental group. This means that group counseling services with the REBT approach are effective in reducing student anxiety facing college entrance exams.

Results and Discussion

The results of this study indicate that group counseling services using the REBT approach have been proven effective in reducing students' anxiety regarding college entrance exams. This finding aligns with Albert Ellis's theory, which states that emotional disorders such as anxiety arise from irrational thoughts that are unrealistic about certain situations (Chadha et al., 2019; Opre & Macavei, 2022). Through the group counseling process, students are guided to identify, challenge, and replace these irrational thoughts with more rational and adaptive thought patterns. The reduction in anxiety levels in this study was seen across three main dimensions: emotional, cognitive, and physiological, as described by Calhoun and Acocella (1990) in Wittkamp et al. (2021) and Moritz et al. 2016). On the emotional side, students reported feeling calmer, more confident, and less afraid of exam results (Chęć et al., 2025; Thiemann et al., 2023). On the cognitive side, students demonstrated the ability to think more positively and realistically about the possibility of failure and success.

Meanwhile, on the physiological side, there was a decrease in symptoms such as heart palpitations, excessive sweating, and sleep disturbances. These results are consistent with research conducted by Riepenhausen et al. (2022) and Lievore et al. (2025), which found that REBT group counseling can reduce academic anxiety by changing negative thought patterns to rational ones. Similarly, Ben-Zion et al. (2025) and Takdir et al. (2025) found that implementing REBT in a group setting can improve students' emotional calm and preparedness for exams. In addition to counseling techniques, the program's effectiveness is also supported by the group dynamics formed during the sessions. Interactions between group members allow students to provide emotional support and share experiences, thus accelerating the process of cognitive restructuring and self-acceptance (Mathers-Jones & Todd, 2023).

Student observations and reflections during the counseling process reinforce these quantitative findings. Several students reported feeling more in control while studying and facing exam simulations, as well as more focused and optimistic about their own abilities (Avdimiotis et al., 2024; Liu et al., 2023). These conditions indicate positive cognitive and affective changes resulting from the implementation of REBT. Overall, the results of this study confirm that REBT is effective as a group counseling intervention for reducing students' academic anxiety, particularly during the stressful transition to college. This effectiveness is evident not only in statistical changes in anxiety scores but also in changes in students' behavior and emotional expression when facing academic challenges (Anine et al., 2022; Ahn et al., 2023).

Conclusion

Based on the results of data analysis and discussion, it can be concluded that group counseling services with the Rational Emotive Behavior Therapy (REBT) approach are effective in reducing students' anxiety facing college entrance exams. The results of the Wilcoxon Signed Rank Test showed a Z value = -2.36 with p = 0.01 (p < 0.05), which means there was a significant difference in anxiety levels before and after treatment in the experimental group. The effectiveness of the service is seen in the reduction of anxiety in three main dimensions: Emotional anxiety, where students become calmer and less prone to panic before the exam; Cognitive anxiety, characterized by reduced negative thoughts and increased self-confidence; Physiological anxiety, in the form of reduced physical symptoms such as heart palpitations and cold sweats. The REBT group counseling process helps students recognize irrational thoughts, challenge them, and replace them with rational beliefs that are more realistic about the exam situation. In addition, group dynamics play an important role in creating social support and mutual understanding among students.

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