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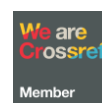
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Rational emotive behavior therapy for reducing adolescent anxiety in post-covid-19 pandemic online learning: group approach and single case design

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ABSTRACT

The COVID-19 pandemic led to prolonged isolation and a widespread shift to online education, which has influenced students' emotional well-being. As schools transitioned back to in-person learning, many students exhibited signs of anxiety. Rational Emotive Behavior Therapy (REBT) is recognized as a promising method for addressing post-isolation anxiety by helping students develop rational thoughts and emotional regulation. This study explores the prevalence of anxiety among students involved in distance learning and examines the effectiveness of REBT in alleviating this anxiety. A single case design was employed with 6 students, selected from an initial group of 121 participants from five junior high schools in Denpasar, Indonesia. After filling out an anxiety questionnaire, 6 students were selected based on their anxiety levels and willingness to participate. These students underwent 12 REBT sessions, which included both group therapy and individual techniques. The analysis of pre- and post-test data revealed a significant reduction of 33.5% in anxiety levels, with statistical analysis showing a p-value of 0.025 (<0.05), confirming the positive impact of REBT. The study highlights the importance of addressing anxiety during transitions in education and underscores the potential of REBT in improving students' emotional well-being in post-pandemic learning environments. Further research can explore the long-term effects of REBT and its integration into school-based mental health programs.

Keywords:

Rational emotive behavioral therapy (REBT),
Adolescent anxiety,
Online learning,
Single case design,
Group therapy,
Bali Students

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Introduction

The COVID-19 pandemic has brought about a significant transformation in the education sector, leading to the widespread adoption of online learning. Prolonged engagement with online learning platforms has not only given rise to new learning behaviors among students but has also engendered a shift towards greater independence, necessitating the utilization of diverse information and communication technology (ICT) tools (Fauzi, 2022; Heng & Sol, 2021). This mode of learning, characterized by reduced direct interaction with educators and peers, has become a defining feature of the pandemic era. However, as the pandemic's grip begins to loosen and traditional in-person learning makes its return, this shift from virtual classrooms to physical ones has introduced a distinct set of challenges, prominently among them being heightened levels of anxiety experienced by students (Cahaya et al., 2022; Tanveer et al., 2020).

Findings from Mendelsohn's et al., (2024) research on the prevalence of depression in young people show that worldwide rates vary from 2.2% to 11.8% of the population, with one study revealing that one in four young people report symptoms of depression. More specifically, 44% of young people in the United States exhibit depression, while in China, prevalence rates range from 11% to 44% of

young people. The data reviewed showed that 20% of young people globally exhibit symptoms of anxiety or stress reactions, with countries such as Denmark (44%), Canada (45%) and the United States (32%) reporting particularly high rates. The notable transformation in learning habits, brought about by the implementation of Distance Learning (DL) during the pandemic, has reverberated through various psychological dimensions, notably manifesting as anxiety among students. Furthermore, it is well-documented that calamitous events such as the COVID-19 pandemic exert a profound influence on diverse aspects of student development, spanning emotional, social, and cognitive domains (Bae et al., 2024; Grabska et al., 2023).

Anxiety caused by online learning has become a critical issue, especially after the sudden shift to this system during the Covid-19 pandemic (Adedoyin & Soykan, 2023; Besser et al., 2022). Uncertainty, lack of social interaction, excessive academic pressure, and limited access to technology have triggered anxiety in many students, especially teenagers (Besser et al., 2022; Guessoum et al., 2020). The severity varies from mild disturbances such as difficulty concentrating to serious impacts such as decreased motivation to learn, social isolation and long-term mental health disorders. In some cases, this anxiety has even led students to withdraw from learning or experience a significant drop in academic performance (Morton, 2018; Zeidner, 2014). This problem not only affects students' individual well-being but also threatens the overall quality of education, making it an urgent issue that requires effective interventions such as psychological therapies to address (Kontoangelos et al., 2020; Shah et al., 2020).

The APA Dictionary of Psychology defines anxiety as a natural individual response to imminent future threats (Association, 2015). Our initial survey findings reflect the apprehension experienced by several students during DL participation, stemming from concerns that this mode of education might endure indefinitely, thereby depriving them of the opportunity for in-person interactions and collaborative study sessions with peers. This sentiment aligns with prior research, which indicates that the implementation of DL during the pandemic failed to achieve optimal outcomes and contributed to feelings of monotony among students (Abbasnejad et al., 2024; Laar et al., 2021). Additionally, the sudden introduction of DL has left parents grappling with confusion and impatience as they navigate the role of guiding their children's education, ultimately impacting the effectiveness of the DL approach (Bedolla, 2024; Ly & Boll, 2024).

Several efforts have been made to optimize the delivery of home-based learning (or distance learning, in this context), including the utilization of online platforms such as Edmodo (Asfar & Asfar, 2021), Google Meet (Irons, 2022), Google Classroom (Suparjan & Mariyadi, 2021), and even WhatsApp (Agustina & Nandiyanto, 2021). However, these efforts are still not enough to overcome the barrier and limitations in DL implementation. In addition, from our preliminary investigation, students often have negative thinking when they hear or read news related to COVID-19, causing feelings of anxiety. Further, during the DL period, numerous students claimed that they were feeling discomfort due to unknown causes, while some believed this was due to too many DL activities at home. Anxiety often arises because of irrational thinking about an excessive event. Irrational thinking has been associated with major mental illnesses such as depression, anxiety, aggression, and guilt (Buschmann et al., 2018; DiGiuseppe et al., 2018). The accomplishment of goals may be impacted by irrational beliefs, which can also lead to dysfunctional emotional and behavioral outcomes (Terán et al., 2020). On a severe level, irrational thinking leads to distortion of reality due to errors in assessing the situation without being accompanied by available evidence. Moreover, illogical thinking makes someone biased and irrational in evaluating themselves and their environments (e.g., family and friends) (Bortolotti, 2014).

During our preliminary assessment, many participants believed that instead of providing a sense of safety, DL caused irrational anxiety for them. Fortunately, most respondents claimed that they had only light anxiety feelings that have not yet affected their life functions. However, if not treated properly, these anxiety feelings might worsen, causing a life function impairment and reduced quality of life. Therefore, anxiety arising from the impact of restrictions on community activities and DL policies needs to be addressed so that it will not become a more serious psychological problem.

Various efforts can be made to overcome student anxiety due to the application of DL. One of them is to provide Rational Emotive Behavior Therapy (REBT). REBT focuses on individual behavior, emphasizing that irrational thoughts cause problematic behavior. Therefore, REBT treatment focuses on individual thoughts (Ellis, 2021). Individuals are, generally, rational beings. Often, the source of human beings' unhappiness is irrationality. Hence, an individual might be able to achieve well-being by learning to think rationally (Wood et al., 2017).

Rational Emotive Behaviour Therapy (REBT) helps individuals identify and change irrational thought patterns that are the root cause of anxiety through an approach that focuses on the relationship between thoughts, emotions and behaviour (David et al., 2005; Dryden & Neenan, 2020). The therapy begins by helping individuals recognise the irrational beliefs that arise in certain situations, such as excessive fear of failure or pressure to be perfect. Once these thought patterns are identified, the therapist works with the individual to evaluate the accuracy of these beliefs and replace them with more rational and supportive beliefs. This process involves discussion, reflection, and the use of cognitive techniques such as reframing and problem-solving (Vernon, 2019). With this approach, REBT not only reduces the perceived anxiety but also equips the individual with the skills to deal with similar challenges in the future more adaptively (MacLaren et al., 2016).

While many previous studies have examined the impact of online learning on students' mental health during the Covid-19 pandemic, there are limited studies on the application of Rational Emotive Behaviour therapy (REBT) to reduce adolescents' anxiety after prolonged isolation. This gap provides an opportunity to fill the literature gap by testing the effectiveness of REBT as a targeted solution in supporting adolescents' mental wellbeing while enhancing their online learning experience. This study offers a unique contribution by applying REBT using a group approach, which allows participants to share their experiences and gain social support to overcome the impact of isolation. In addition, this study used a Single Case Design (SCD) to evaluate individual changes in depth, providing rich and focused data on the effectiveness of REBT in the post-pandemic educational context. Given the significant impact of the pandemic on adolescent anxiety, this study suggests that REBT can help identify and restructure irrational thoughts, support adolescents' mental wellbeing, as well as improve their academic success amidst the ongoing changes in the education system.

The purpose of this study is to explore the effectiveness of Rational Emotive Behaviour therapy (REBT) in reducing anxiety experienced by adolescents during post-Covid-19 pandemic online learning. By understanding the extent to which the REBT approach can help adolescents identify and change irrational thought patterns that trigger anxiety, this study aims to make a real contribution in improving their psychological well-being. In addition, this study is expected to support the effectiveness of online learning by creating a more stable and productive mental state for adolescents, so that they can better adapt to the challenges of the digital education era.

Methods

This study uses quantitative and qualitative data collection methods. In addition, the statements used in the anxiety scale have a closed form and are presented in an optional format, making it easier for the respondent to respond (Harpe, 2015). Then, as a qualitative data collection tool, we used in-depth interviews, followed by behavioral observations of the participants. In this study, the anxiety level of the students during online learning was revealed using the theory of anxiety symptoms, following Greenberger & Padesky's (2015) theory. The items used in the anxiety scale consist of items that favor the object to be measured (favorable) and items that do not favor the object to be measured (unfavorable). The answer scores for favorable items ranged from 4 to 1, whereas for unfavorable items ranged from 1 to 4. According to Taherdoost (2016), a set of questionnaires can be evaluated through the total item coefficients. An appropriate questionnaire should be capable of explaining the corresponding parameters with adequate differential power. The suitability of a questionnaire's item with the scale function in disclosing individual differences can be determined through cross-correlations.

This study used a 48-item anxiety scale as the main tool to measure adolescents' anxiety level in online learning, whose validity and reliability have been tested previously. Prior to data collection, testing was conducted on the research instrument to determine its validity and reliability. Of the 48 items tested, 33 items were declared valid while 15 items were invalid. The reliability of this scale was determined through the reliability coefficient, which ranges from 0 to 1.00, where values close to 1.00 indicate a high level of reliability (Taherdoost, 2016). Results show that the reliability coefficient of this anxiety scale is 0.883, which indicates a fairly high level of reliability. This validity and reliability make the anxiety scale a reliable measurement tool to accurately identify students' anxiety levels in the context of online learning. Changes in anxiety scores were interpreted by comparing results before and after the intervention, where a decrease in scores reflected a significant reduction in anxiety, providing empirical evidence for the effectiveness of REBT therapy in supporting students' mental wellbeing.

This study uses the Single Case Design (SCD) experimental design. In an SCD, there are several subjects in one group or a single subject studied ($n=1$). The SCD design was chosen because it allows researchers to focus on the changes experienced by individuals in detail through repeated observations over a period of time. The SCD is relevant in this study as it can measure the direct impact of the intervention on individual students, given the small number of participants and the personalized nature of the intervention. To find out the effect of an intervention, which in this case is the REBT, a comparison is made of the subject's condition (which in this case is the student's psychological) from time to time. In addition, the student's psychological behavior was measured before, during, and after the REBT intervention. Changes in psychological behavior before and after treatment were then compared to the subjects themselves. Using SCD, this study can provide strong empirical evidence of the cause-and-effect relationship between REBT therapy and anxiety reduction, while ensuring that each individual outcome has significant practical relevance.

The quantitative data on students' anxiety levels were obtained through Google Forms, containing an anxiety scale questionnaire. This research was conducted at five junior high schools spread across Denpasar, Indonesia. A total of 121 students filled out and returned an anxiety scale questionnaire. Of the 121 students who completed the initial questionnaire to measure anxiety levels, only 6 students were selected for the intervention based on certain criteria. This selection was done by considering the high level of anxiety based on the questionnaire results as well as students' willingness to participate in the therapy programme. This selection process aimed to ensure that the intervention focused on students who needed the most support to manage their anxiety in online learning. This approach also allows the research to explore the effectiveness of Rational Emotive Behaviour Therapy (REBT) in more depth in the context of individuals with specific needs, so that the results can provide a clear picture of the impact of the intervention. By using small groups, the research can be conducted with a more personalized and controlled approach, ensuring that each student benefits optimally from the therapy programme.

After filling in the informed consent, the six students participated in a series of REBT activities for 12 sessions on three consecutive days. The REBT intervention in this study consisted of 12 structurally designed sessions to address adolescents' anxiety in post-pandemic online learning. Each session lasted for 60-90 minutes and involved the application of the main REBT techniques, namely cognitive dispute, imagery dispute, and relaxation. (1) Cognitive Dispute: This technique is applied to help students identify and challenge their irrational beliefs. For example, students are invited to examine beliefs such as 'I should always succeed in online assignments' by evaluating evidence that supports or refutes the belief. (2) Imagery Dispute: Used to train students to replace negative mental scenarios with more realistic and positive ones. In this session, students are invited to visualise a situation that triggers their anxiety, and then directed to think of a rational way to respond to the situation. (3) Relaxation: This technique is applied at the end of each session to help students manage physiological responses to anxiety. Students are taught deep breathing and progressive muscle relaxation techniques to create mental calmness.

The session structure includes an opening (5-10 minutes) to review the student's progress, a core session (40-60 minutes) that focuses on a specific technique, and a closing (10-20 minutes) for reflection and homework. Each session builds progressively from problem identification, basic skills training, to self-application. This approach ensures students gain in-depth understanding and practical ability to address their anxiety on an ongoing basis. The qualitative data in this study were obtained through in-depth interviews and by observing students' attitudes and behavior while participating in REBT activities. After participating in 12 REBT sessions, the six students again filled out the anxiety scale.

This study used Wilcoxon and Mann-Whitney statistical tests to analyze quantitative data. The Wilcoxon test was used to compare differences in anxiety scores before and after the intervention in the same group (pre-test and post-test), while the Mann-Whitney test was used to compare anxiety scores between groups (e.g., intervention group and non-intervention group) when the data did not fulfil the assumption of normal distribution (Corder & Foreman, 2014). These two nonparametric tests were chosen due to their flexibility in analyzing ordinal data or data with non-normal distribution, which is in line with the characteristics of the data in this study. In addition, qualitative analyses were conducted for data obtained through interviews and observations. The thematic method was used to analyze the interviews, where transcripts of the interviews were read and coded to identify key themes related to the students' experiences during the REBT intervention. Observations were analyzed using a descriptive approach, noting changes in students' behaviour or responses to therapy sessions. This combination of quantitative and qualitative approaches provided a more holistic understanding of the effectiveness of the REBT intervention in reducing adolescent anxiety.

Results and Discussion

From the 121 returned questionnaires, it is revealed that the majority of students experienced anxiety that is attributed to distance learning. Among them, we ask six students that have the highest anxiety profiles to participate in further research on REBT intervention.

Table 1. T-Test Statistical Test Results

	Anxiety Score Mean	<i>n</i>	Std. Deviation	Std. Error Mean
Pre-test	2.00	6	0.000	0.000
Post-test	1.33	6	0.516	0.211

As shown in Table 1, the results revealed a statistically significant reduction in the mean anxiety score, with a 33.5% decrease from pre-test to post-test. This decrease indicates that the REBT intervention had a noticeable impact in reducing students' anxiety levels. This significant reduction indicates the success of the therapy in helping students overcome irrational thought patterns and improve their ability to deal with anxiety, particularly in the post-pandemic online learning context. This finding strengthens the empirical evidence that the REBT approach can be an effective solution to support students' mental health, as well as making a practical contribution in improving the effectiveness of online learning. The REBT intervention is given based on the ABCDEF theory, which states that active directive teaching begins during focus group discussions (FGD) (Ellis, 2021).

Based on the statistical test results presented in Table 2, a significant value of 0.025 or <0.05 was found. Therefore, it can be concluded that there is a statistically significant difference in students' anxiety category before and after the REBT intervention. These results indicate that REBT therapy effectively affected students' anxiety levels, evidencing a substantial change after the intervention was implemented. These findings support the hypothesis that REBT is a relevant and effective approach to addressing anxiety, especially in the post-pandemic online learning context, as well as

providing strong justification for its use in mental health intervention programmes in educational settings.

Table 2. Paired Sample Test Statistical Results

	Mean	Std. Deviation	Std. Error Mean	95% Confidence Lower Upper		t	df	Sig. (2-tailed)
Pre-test and Post-test Pair	0.667	0.516	0.211	0.125	1.209	3.162	5	0.025

Online learning can trigger anxiety in students due to several factors, such as limited social interaction, dependence on technology, and difficulty in managing time and tasks independently. Students often feel isolated, worried about falling behind, and anxious about not being able to keep up with the rhythm of learning without direct guidance from the teacher. In addition, distractions from the home environment, such as distraction or discomfort, make matters worse. Rational emotive behaviour therapy (REBT) addresses this anxiety by identifying and changing irrational thought patterns that exacerbate anxiety. In the context of online learning, REBT helps students to recognise irrational beliefs such as 'I have to be perfect at everything' or 'If I don't know the answer, I will fail' and replace them with more realistic and positive mindsets. With this approach, REBT not only reduces anxiety, but also enhances students' ability to deal with challenges in online learning in a more constructive and adaptive way.

First, the concept of A (antecedent) is defined as the event that causes the problem. In this case, the event is distance learning during in post prolonged isolation pandemic. Among the symptoms experienced by the research subjects are fears of poor grades, cold sweats and fast heartbeats during DL, inability to follow the classes, and feeling incompetent to obtain good grades. The continuing condition of in post prolonged isolation pandemic and the uncertainty about when offline learning will begin make the research subjects believe that they were unable to deal with the DL situation. This is because they have to be at home all day to study, feel helpless in participating in online learning, feel alone, lack social interactions, unfocused, distracted, less productive, and rather do other activities than study. Instead of easing students, DL surprisingly causes additional learning burdens for the students. At the end of the day, some students experience overwhelming situations, making them feel exhausted and burnout. This is because some teachers believe that providing extensive assignments can compensate for the loss of offline learning, while, in fact, it is not. In addition, some respondents claim that DL removes time boundaries. They could easily allocate time for school and study during the pre-pandemic period. During the DL period, however, the time boundary becomes blurred, making it difficult for them to allocate their time.

Based on the concept of B (belief), negative statements made by participants during interactions during REBT interventions and interviews are a form of self-destructive irrational beliefs. They often think negatively and harbor emotions, causing psychological disorders. In this study, it was found that the majority of research subjects tended to experience a higher intensity in physiological symptoms compared to other symptoms. This result was revealed during the preliminary interview and the pre-test. Fortunately, after receiving the REBT intervention, the intensity of the symptoms experienced by the subject decreased, as indicated in the results obtained after carrying out the post-test. During the DL period, it was found that the majority of participants tended to suffer dizziness before going to bed due to being exposed to gadgets for most of the day, stomach aches before online classes started, difficulty in sleeping, suddenly sweating profusely when the teacher made an announcement, heart beating faster, and always asking friends about whether there is any homework or not. These factors are an indication of the anxiety experienced by students.

Anxiety has an impact that can deteriorate students' physiology, psychology, academic, and social functions. The impact of the irrational belief behind the anxiety disorder can be categorized into the concept of C (consequences). Among the consequences of distance learning are excessive worry, reduced concentration in learning, decreased academic achievement, lack of enthusiasm, always feeling insecure and uncomfortable when in the school environment, and reduced social ability to interact with their environment. In the proposed REBT intervention, the first step in reducing distance learning anxiety is recognizing and understanding oneself. The subject is invited to tell a glimpse of themselves and then slowly encouraged to state the strengths and weaknesses that exist in them through the "knowing myself" sheet. The strengths and talents that have been stated are then used as a medium to foster positive thoughts and self-confidence that each subject has strong potential in overcoming their problems.

The strengths respondents possess in this study include academic potential, creativity, special talents or skills in arts and sports, and even jokes & story-telling skills. However, these strengths were blurred due to feelings of depression and anxiety that they experienced. Therefore, in the REBT intervention, efforts are made to bring out these advantages so that the subject becomes more confident. The weaknesses of the respondents in this study include laziness, lack of academic rigor, and sometimes feeling afraid for no apparent reason. However, the subject's self-weakness has an indication of irrational beliefs. Therefore, subjects were shown which parts of their weaknesses were unreasonable in the REBT intervention. The concept of D (dispute) cognitively begins to be instilled in students. One way to refute student weaknesses is by asking what the evidence of their weaknesses is, what strengthens their minds, and what happens if their beliefs are wrong. With the concept of cognitive dispute, the subject becomes aware of the cognitive distortions they have been experiencing.

Personal feelings are often influenced by what individuals think about themselves. The individual's thoughts are not necessarily objective thoughts about their actual situation (Beck, 2015). This cognitive process deviation is called cognitive distortion. The irrational beliefs experienced by a person tend to be maintained within themselves, causing severe anxiety in the long term. To reduce anxiety, a person should practice positive thoughts to eliminate irrational beliefs. The unpleasant emotional reactions experienced by individuals could be used as a sign that what they think about themselves may be irrational (Kring & Johnson, 2022). Therefore, an individual can learn to build objective and rational thoughts about the events that are experienced. Changing the mindset by removing illogical thinking can be done through dispute imagery techniques. In the REBT intervention, the dispute imagery technique begins with providing psychoeducation so that the subject identifies the anxiety feeling and understands the concept of problem-solving. Furthermore, through simple story-telling that is done in groups, group dynamics become visible due to discussions and mutual feedback. Not only carrying out cognitive disputes, but participants in the study group can also carry out constructive dispute imagery by imagining, formulating, and solving problems.

After carrying out cognitive and imagery disputes, a new effective philosophy (E) will naturally emerge. Cognitive changes that occur in research subjects positively impact their behavior. These changes lead to new effective behaviors and new positive feelings. In the structure of psychodynamics, a person's behavior and characteristics can be used as a focus of attention, which is then directed to the parts of the personality into positive and negative characteristics (Gabbard, 2014). After that, the subject is slowly encouraged to sincerely accept and express their feelings to allow room for new thoughts, feelings, and behaviors. Relaxation exercises are one of the behavioral techniques in dealing with anxiety. The relaxation exercises in the REBT intervention aim to release feelings of tension, worry, and fear. Thoughts and feelings are expected to become calmer and more relaxed after the relaxation exercises. After that, the research subjects were asked to reveal what they were thinking and feeling at the moment. If they had negative thoughts, the subject was asked to show evidence supporting the negative thoughts. At this stage, the subject was seen to be able to bring up a new effective philosophy, indicated by the emergence of new beliefs, new positive feelings, and new positive behaviors that were expressed in "the new me" worksheet.

In the last stage of the REBT intervention, participants were asked to practice problem-solving processes in real situations through role play to obtain new positive feelings (F). According to the participant's responses, the fresh feeling that is felt includes the disappearance of worries when going to school, increased enthusiasm for going to school and participating in extra-curricular activities, reduced anxieties about academic assignments, and increased positive emotions. Irrational thinking is one of the main problems for individuals that cause anxiety since it hinders individuals from achieving goals, creates extreme negative emotions that cause stress and inhibit mobility, creates feelings of helplessness; blames reality (misinterpreting situations); and have illogical thoughts in evaluating themselves, other people, and the environment (Terán et al., 2020).

REBT (Rational Emotive Behaviour Therapy) changes students' mindset or behaviour in dealing with anxiety by focusing on identifying and changing irrational thought patterns that trigger anxiety. One of the main aspects of REBT is helping individuals recognize irrational beliefs, such as thinking that failure in an online exam will mean total failure in their lives. By using techniques such as disputing these irrational beliefs, students can learn to replace them with more rational and realistic thoughts. For example, students who feel anxious about missing material can be taught to see the situation as an opportunity to learn independently, rather than as a threat to be avoided. This approach directly reduces anxiety, as students feel more in control of their reactions to the pressures that come with online learning. In addition to internal factors such as mindset and personal beliefs, there are several external variables that influence the decrease in students' anxiety levels (Zeidner, 2014). Factors such as social support from family, friends or teachers can strengthen the effectiveness of REBT intervention. If students feel supported by those around them, they are more likely to feel confident and able to overcome challenges in online learning. A comfortable and non-stressful environment also plays an important role in reducing anxiety. For example, if students have a quiet and distraction-free space to study, they may feel more focused and able to manage their time better, ultimately reducing anxiety related to online tasks or exams.

The relationship between the theories underlying REBT and the results of previous research support the effectiveness of this approach in reducing anxiety. REBT, developed by Ellis (2021), focuses on the principle that anxiety often stems from irrational and unrealistic beliefs that individuals hold. Past research from Kim et al., (2015) has also shown that therapies that teach individuals to respond to stress in a more adaptive way, as in REBT, can significantly reduce anxiety symptoms. These studies are in line with perspective from Cristea et al., (2015), which showed that after the REBT intervention, students experienced a significant reduction in anxiety. Thus, both REBT theory and empirical evidence from previous studies support the conclusion that this therapy can help students manage anxiety arising from online learning in the post-pandemic era. The evaluation results and participants' testimonies obtained after the REBT intervention showed the effectiveness of the REBT intervention. The REBT intervention provided through a group approach makes the subject feel that they are not alone or isolated. In addition, REBT interventions through a group approach have increased self-confidence and a sense of usefulness toward others. This is inline with the studies (Fitri Indriani & Dwi Sulisworo, 2022; Ro' uf et al., 2022) stating that group learning and conseling is important in enhancing the effectivity of the delivery. In addition, group intervention enables the participant to be able to observe and imitate the facilitators or other members in behaving and solving problems.

Analysis of differences between subjects in this study showed that each individual responded to the REBT intervention in a unique way, reflecting differences in their psychological characteristics and personal experiences. Some participants showed significant reductions in anxiety symptoms, while others experienced only minimal changes. This difference could be influenced by various factors, such as the individual's level of openness to change, previous experience with therapy or psychological interventions, as well as the way they cope with stress and anxiety. For example, some students who are more open to replacing their irrational thought patterns more quickly experience the benefits of REBT therapy, whereas students with a tendency to think negatively or rigidly may need more time to internalise the techniques taught. In addition, external factors such as social support and learning environment also play an important role in how effectively these interventions

are accepted and applied by each individual. Thus, this analysis provides an illustration that the response to REBT is highly dependent on the interaction between internal and external factors affecting the individual.

Overall, participants in this study were able to train themselves to develop rational beliefs through REBT techniques. Even though the REBT intervention has ended, it is hoped that they will still be able to develop their positive thinking. Suppose the individual is actively and continuously able to refute irrational beliefs. In that case, it means that the individual challenges those beliefs until they are able to prove that their beliefs are wrong and then let go of those negative beliefs. The individual will eventually be able to get rid of factor C (consequences), which is a negative symptom. Negative emotional consequences can be suppressed if individuals continue to dispute irrational beliefs strongly (Ellis, 2021).

Several other factors that also influence an intervention's success are modules, trainers, participants, and facilities. The modules in this study were carefully formulated through a review of relevant concepts and related research results. The modules are derived from valid high-quality underlying theories. The module used in this study has gone through validation and professional judgment. In addition, the modules in this study have previously been tested and used in several similar studies (unpublished data). The REBT intervention in this study was provided through a group approach. In group therapy, the open concept is intentionally created in a pleasant, non-threatening, and non-judgmental atmosphere. The group approach is considered effective for overcoming students' anxiety problems because it allows students to discuss personal problems in group dynamics. This allows students to solve their problems with the help of other group members. Due to this reason, gradually, group members will be able to express their experiences and feelings in a safe yet comfortable environment without being judged by others.

The group approach in REBT provides a platform for students to share personal experiences, which can significantly impact the outcome of the intervention. Group dynamics can be a crucial factor in the therapeutic process, as the shared experience of anxiety allows members to feel understood and supported. The social support that emerges within the group fosters a sense of belonging and reduces feelings of isolation. Moreover, the peer influence within the group can motivate students to engage more actively in the therapeutic process, as they observe others making progress or adopting healthier thinking patterns. These social interactions and the collective effort to overcome anxiety can play a pivotal role in enhancing the overall effectiveness of REBT.

In addition to the social support, the group setting also allows for the development of group cohesion, which can strengthen the therapeutic process. Group members may offer each other constructive feedback, share coping strategies, and provide emotional validation, all of which contribute to the reduction of anxiety. However, it is important to acknowledge that group dynamics can also present challenges, such as peer pressure or conflicts that may hinder individual progress. Thus, while the group approach offers several advantages, it is essential to carefully manage group interactions to ensure that the positive influences of social support and group cohesion outweigh any potential negative effects on the intervention's success.

The duration of REBT intervention for 12 sessions provides significant results in reducing students' anxiety levels, although this duration is relatively short compared to other interventions. This short duration can be an advantage because it is more efficient and easier to implement in an educational environment with a busy schedule. However, this time limitation may also be an obstacle to exploring more complex anxiety issues or ensuring deep internalization of the techniques. In addition, these findings have not been extended to a broader context, such as application in other schools or a larger population, so generalization of the results is limited. Factors such as the age, gender and socio-economic background of the participants also need to be considered, as these may affect the response to the intervention. For example, younger students may require a simpler approach, while differences in socio-economic background may affect access to external support that complements the intervention. Further discussion of these moderating factors will provide more comprehensive insights and ensure the effectiveness of REBT across different contexts.

Conclusion

The conclusion of this study shows that Rational Emotive Behavior Therapy (REBT) is effective in reducing anxiety among adolescents engaged in online learning after the prolonged isolation period caused by the Covid-19 pandemic. The significant reduction in anxiety among participants after undergoing REBT intervention indicates that this therapy can help students identify and change irrational thought patterns related to academic and social anxiety in the context of online learning. The application of REBT in a group approach provides additional benefits, where group dynamics and social support strengthen the therapy process. The uniqueness of this study lies in the use of a Single Case Design method, allowing for in-depth analysis of each subject, although limited by a small sample size.

However, there are some limitations in this study that need to be considered in the conclusion. The intervention duration of only 12 sessions may be too short to provide long-term impact on students' anxiety, and the small sample size limits the generalizability of the results to a larger population. This study also does not discuss in detail external factors that may moderate the results, such as socio-economic background and individual psychological conditions. As a practical implication, the findings suggest that REBT programs could be integrated into school curricula, especially in the context of online learning, to support students' mental health. Schools might consider training teachers to recognize signs of anxiety and provide appropriate interventions. Future research is recommended with a larger sample size and longer intervention duration, as well as testing the application of REBT in a broader educational context.

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References

- Abbasnejad, B., Soltani, S., & Wong, P. (2024). A systematic review of online learning and teaching strategies during the COVID-19 pandemic: implications for the construction management sector. *Smart and Sustainable Built Environment*, 13(4), 934–959.
- Adedoyin, O. B., & Soykan, E. (2023). Covid-19 pandemic and online learning: the challenges and opportunities. *Interactive Learning Environments*, 31(2), 863–875.
- Agustina, S., & Nandiyanto, A. B. D. (2021). The effectiveness of distance learning using learning management system media and whatsapp groups at senior high school. *Indonesian Journal of Multidiciplinary Research*, 1(1), 89–98.
- Asfar, A., & Asfar, A. (2021). The effectiveness of distance learning through Edmodo and Video Conferencing Jitsi Meet. *Journal of Physics: Conference Series*, 1760(1), 12040.
- Association, A. P. (2015). *Anxiety disorders: DSM-5® selections*. American Psychiatric Pub.
- Bae, S. H., Jo, M. G., & Han, S. I. (2024). Unmasking Student Dynamics: the Impact of COVID-19 on Social-Emotional Development and Learning Engagement. *IJREE-International Journal for Research on Extended Education*, 11(2), 46–71.
- Beck, A. T. (2015). Cognitive therapy. In *Evolution of psychotherapy* (pp. 149–163). Routledge.

- Bedolla, V. (2024). *The Remote Learning Experiences of Middle School English Learners During the COVID-19 Pandemic: A Narrative Study From the Perspective of Parents*. Concordia University Irvine.
- Besser, A., Flett, G. L., & Zeigler-Hill, V. (2022). Adaptability to a sudden transition to online learning during the COVID-19 pandemic: Understanding the challenges for students. *Scholarship of Teaching and Learning in Psychology*, 8(2), 85.
- Bortolotti, L. (2014). *Irrationality*. John Wiley & Sons.
- Buschmann, T., Horn, R. A., Blankenship, V. R., Garcia, Y. E., & Bohan, K. B. (2018). The relationship between automatic thoughts and irrational beliefs predicting anxiety and depression. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 36, 137–162.
- Cahaya, A., Yusriadi, Y., & Gheisari, A. (2022). Transformation of the Education Sector during the COVID-19 Pandemic in Indonesia. *Education Research International*, 2022(1), 8561759.
- Corder, G. W., & Foreman, D. I. (2014). *Nonparametric statistics: A step-by-step approach*. John Wiley & Sons.
- Cristea, I. A., Stefan, S., David, O., Mogoase, C., & Dobrean, A. (2015). *REBT in the Treatment of Anxiety Disorders in Children and Adults*. Springer.
- David, D., Szentagotai, A., Eva, K., & Macavei, B. (2005). A synopsis of rational-emotive behavior therapy (REBT); fundamental and applied research. *Journal of Rational-Emotive and Cognitive-Behavior Therapy*, 23, 175–221.
- DiGiuseppe, R., Leaf, R., Gorman, B., & Robin, M. W. (2018). The development of a measure of irrational/rational beliefs. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 36, 47–79.
- Dryden, W., & Neenan, M. (2020). *Rational emotive behaviour therapy: 100 key points and techniques*. Routledge.
- Ellis, D. J. (2021). *Rational emotive behavior therapy*. American Psychological Association.
- Fauzi, M. A. (2022). E-learning in higher education institutions during COVID-19 pandemic: current and future trends through bibliometric analysis. *Heliyon*, 8(5).
- Fitri Indriani, & Dwi Sulisworo. (2022). Figure Out the Online Discussion Activeness of Pre-Teacher Education Students. *Journal of Pedagogy and Education Science*, 1(01), 29–38. <https://doi.org/10.56741/jpes.v1i1.7>
- Gabbard, G. O. (2014). *Psychodynamic psychiatry in clinical practice*. American Psychiatric Pub.
- Grabska, M., Gevorgyan, S., & Petrosyan, R. (2023). *Some Reflections on Covid-19 Impact on Students' Academic Motivation and Psychological Well-being after Lockdowns*.
- Greenberger, D., & Padesky, C. A. (2015). *Mind over mood: Change how you feel by changing the way you think*. Guilford Publications.
- Guessoum, S. B., Lachal, J., Radjack, R., Carretier, E., Minassian, S., Benoit, L., & Moro, M. R. (2020). Adolescent psychiatric disorders during the COVID-19 pandemic and lockdown. *Psychiatry Research*, 291, 113264.
- Harpe, S. E. (2015). How to analyze Likert and other rating scale data. *Currents in Pharmacy Teaching and Learning*, 7(6), 836–850.
- Heng, K., & Sol, K. (2021). Online learning during COVID-19: Key challenges and suggestions to enhance effectiveness. *Cambodian Journal of Educational Research*, 1(1), 3–16.
- Ironsi, C. S. (2022). Google Meet as a synchronous language learning tool for emergency online distant learning during the COVID-19 pandemic: Perceptions of language instructors and preservice teachers. *Journal of Applied Research in Higher Education*, 14(2), 640–659.
- Kim, M. A., Kim, J., & Kim, E. J. (2015). Effects of rational emotive behavior therapy for senior nursing students on coping strategies and self-efficacy. *Nurse Education Today*, 35(3), 456–460.
- Kontoangelos, K., Economou, M., & Papageorgiou, C. (2020). Mental health effects of COVID-19 pandemic: a review of clinical and psychological traits. *Psychiatry Investigation*, 17(6), 491.
- Kring, A. M., & Johnson, S. L. (2022). *Abnormal psychology: The science and treatment of psychological disorders*. John Wiley & Sons.
- Laar, R. A., Ashraf, M. A., Ning, J., Ji, P., Fang, P., Yu, T., & Khan, M. N. (2021). Performance, health, and psychological challenges faced by students of physical education in online learning during COVID-19 epidemic: A qualitative study in China. *Healthcare*, 9(8), 1030.

- Ly, A., & Boll, L. (2024). *Navigating Special Education Relationships: Building Collective Efficacy for a Collaborative Team*. Taylor & Francis.
- MacLaren, C., Doyle, K. A., & DiGiuseppe, R. (2016). Rational emotive behavior therapy (REBT): Theory and practice. *Contemporary Theory and Practice in Counseling and Psychotherapy*, 1, 233–263.
- Mendelsohn, A., Greenberger, A., & Friedberg, R. D. (2024). *Impact of the COVID-19 Pandemic on Pediatric Anxiety and Depression: Prevalence Data , Theoretical Synthesis , and Clinical Implications*. 9(4), 328–337. <https://doi.org/10.14218/ERHM.2024.00004>
- Morton, B. M. (2018). The grip of trauma: How trauma disrupts the academic aspirations of foster youth. *Child Abuse & Neglect*, 75, 73–81.
- Ro'uf, A., Mu' ammar, M. A., & Chesoh, M. (2022). The Role of Individual and Group Counseling for Moral Coaching. *Buletin Edukasi Indonesia*, 1(02), 45–52. <https://doi.org/10.56741/bei.v1i02.90>
- Shah, K., Mann, S., Singh, R., Bangar, R., & Kulkarni, R. (2020). Impact of COVID-19 on the mental health of children and adolescents. *Cureus*, 12(8).
- Suparjan, S., & Mariyadi, M. (2021). Google classroom as a distance learning media: Limitations and overcoming efforts. *AL-ISHLAH: Jurnal Pendidikan*, 13(1), 407–416.
- Taherdoost, H. (2016). Validity and reliability of the research instrument; how to test the validation of a questionnaire/survey in a research. *International Journal of Academic Research in Management (IJARM)*, 5.
- Tanveer, M., Bhaumik, A., Hassan, S., & Haq, I. U. (2020). Covid-19 pandemic, outbreak educational sector and students online learning in Saudi Arabia. *Journal of Entrepreneurship Education*, 23(3), 1–14.
- Terán, V. G., Velásquez, E. E., & Fuentes, M. A. (2020). Irrational thinking and psychological distress: A cross-racial/ethnic examination. *Personality and Individual Differences*, 164, 110102.
- Vernon, A. (2019). REBT with children and adolescents. *REBT with Diverse Client Problems and Populations*, 243–263.
- Wood, A. G., Barker, J. B., & Turner, M. J. (2017). Developing performance using rational emotive behavior therapy (REBT): A case study with an elite archer. *The Sport Psychologist*, 31(1), 78–87.
- Zeidner, M. (2014). Anxiety in education. In *International handbook of emotions in education* (pp. 265–288). Routledge.