

## **Efficacy of Rational Emotive Behaviour Therapy on Low Academic Self-Efficacy Among In-School Adolescents in Abia State**

**By**

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### **Abstract**

This study is an empirical evaluation of rational emotive behaviour therapy on academic self-efficacy (ASE) among in-school adolescents in Abia State. Two research questions and two hypotheses guided the study. The study employed a Quasi-experimental design of pretest, posttest non-randomized control group using gender as moderator variable. A total of 24 in-school adolescents were purposively sampled from a population of 687 using Academic Self-efficacy Identification Questionnaire (ASIQ) validated by three experts. Data were collected in two phases of pre-treatment and treatment. Data were analyzed using mean and standard deviation to answer the research questions, and the Analysis of Covariance (ANCOVA) to test the null hypotheses at the 0.05 level of significance. Results indicated that REBT counselling significantly enhanced students' ASE compared to the control group. The findings suggest that the REBT was highly effective in fostering positive cognitive and behavioural changes that improve ASE. There were no gender disparities in treatment outcomes. It was suggested that counsellors employ rational emotive behaviour therapy (REBT) to help in-school adolescents improve their academic self-efficacy.

**Key Words:** Rational emotive, behaviour therapy, Academic self-efficacy, adolescents,

## Introduction

Their development is influenced by physiological, psychological, temporal, and cultural factors (Steinberg, 2021). Adolescence is a unique stage in one's life cycle. They are better at thinking abstractly and seeing the broad picture, but they may struggle to apply it in the moment. The changes that occur throughout this time period cause a lot of issues for both adolescents and society as a whole. Other developmental tasks could include learning to get along with friends of all genders, accepting and maintaining one's physical physique, and becoming more self-sufficient. Academic self-efficacy is one of the concerns and challenges that adolescents experience.

Academic self-efficacy is a term that refers to a student's belief in his or her own ability and control in academic pursuits. Among the many factors that influence academic achievement, academic self-efficacy is seen as a very important non-intellectual factor (Luo et al, 2023). Academic self-efficacy has been defined as a student's belief and confidence in their capability of succeeding in academic endeavors (Basith et al, 2020). Academic self-efficacy is characterized as an individual's psychological understanding of themselves as a result of their learning experiences, which influences their level of self-concept, confidence, worth, behaviours, and exam responses. Academic self-efficacy describes a person's confidence in their abilities to organize, execute and regulate performance to attain designated types of performances. It is the students' beliefs and attitudes toward their capabilities to achieve academic success, as well as belief in their ability to fulfill academic tasks and the successful learning of the materials (Hayat et al, 2020).

Specifically, higher academic self-efficacy is linked to a higher level of learning investment (Sokmen, 2021). A student with a high level of academic self-efficacy tends to put more work into their study, has higher levels of confidence and optimism when setbacks are encountered, resilient in addressing challenges, leading to an overall enhancement of their participation in learning. In contrast, a student with low academic self-efficacy tends to set lower learning goals, have more negative attitudes toward academic challenges, be unwilling to make efforts to overcome setbacks, and face difficulty mobilizing positive learning strategies (Wu et al, 2020).

Adolescents with high or positive academic self-efficacy seek answers and express dissatisfaction without demeaning themselves or others when difficulties arise; they are more mature and stable (Von Soest et al, 2018). People with low academic self-efficacy, on the other hand, tend to be hypersensitive, with fragile senses that are quickly hurt by others; they are hyper attentive and hyper alert to indicators of rejection, inadequacy, and rebuff in relation to examinations or academic activity. Adolescents with low or negative academic self-efficacy believe they are unworthy, inept, and incompetent. They are more likely to violate school rules and regulations, including fighting, interrupting classrooms, defying school authorities, and insulting teachers (Hamoud et al, 2021). Adolescents with low academic self-efficacy are more likely to struggle in school (Arshad et al, 2015).

Given the negative impacts of low academic self-efficacy on adolescents and its significant frequency, there is a need for psychological intervention aimed at increasing their levels of academic self-efficacy. Chandrasekaran et al. (2021) point out the need for psychological counselling services for students with low academic self-efficacy. Through professional psychological counselling, they may be helped to solve their learning problems, rebuild their confidence in learning, and enhance their academic self-efficacy.

Researchers such as Obi and Nicholas (2018) and Uroko (2017) have successfully empirically verified the efficacy of rational emotive behaviour therapy in reducing academic stress in undergraduate students.

Academic self-efficacy has been shown to respond to small changes in students' performance contexts, interact with self-regulated learning processes, and moderate students' academic progress (Akay & Boz, 2020). Most students' academic beliefs or thoughts appear to be self-defeating, and they can be suppressed utilizing intervention tactics such as rational emotive behavior therapy. According REBT model, by identifying and altering negative or irrational thought patterns, individuals can improve their emotional well-being and behavioral responses (Alfaiz et al., 2023). In educational settings, REBT has been widely applied to address academic challenges by helping students replace self-limiting beliefs with positive, empowering thoughts (Johnsen et al., 2024; Sigdya et al., 2024). This cognitive restructuring process allows students

to develop healthier attitudes towards their academic tasks, increasing their motivation and willingness to engage with challenging materials (Chystovska et al., 2024). This study focused on academic self-efficacy among Abia State's in-school adolescents.

There have been few research in recent years that look at a psychotherapeutic strategy to address academic self-efficacy issues. Some include Obi and Nicholas (2018) and Mbakwe and Enwere (2021), who have investigated psychological interventions using Albert Ellis' Rational Emotive Behaviour Therapy (REBT), which is a therapeutic intervention that helps people overcome self-defeating thoughts that impede overall progress in life. Hasanah and Mariyati (2023) examined the impact of CBM interventions on high school students and found that those who participated in REBT counseling demonstrated significant improvements in ASE compared to those in the control group. These findings highlight the potential of REBT to foster not only academic resilience but also positive academic outcomes in students facing academic challenges.

Although low academic self-efficacy cannot be completely eliminated, the way a student sees it and arranges his thoughts can go a long way toward assisting that student in making required modifications and continuing with his academic pursuit. REBT as a mental restructuring mechanism is frequently used as an instructional process, with the therapist actively counselling the client on how to identify irrational and self-defeating beliefs and philosophies. Rational Emotive Behaviour Therapy (REBT) uses the ABCDEF model to train clients. This model explains in detail how an individual's emotional disturbance or low academic self-efficacy is caused by an irrational belief system rather than bad experiences (Obi & Nicholas, 2020). There is considerable empirical evidence that REBT can improve academic self-efficacy among in-school adolescents. REBT has been empirically studied for its effectiveness in enhancing academic self-efficacy. These techniques, such as cognitive disputation, imaginal disputation, behavioural disputation, emotional control card, confrontation and encouragement help students develop a stronger belief in their ability to succeed academically. Studies show that interventions incorporating these methods can lead to reduced academic stress, improved coping mechanisms, and ultimately, higher academic self-efficacy.

However, the technique's usefulness in increasing academic self-efficacy had not been determined at the time of this investigation in the study area. In the current study, the researchers want to empirically validate the efficiency of rational emotive behaviour therapy in improving academic self-efficacy among in-school adolescents in Abia State.

### **Statement of the Problem**

Learners, regardless of their educational level, are expected to demonstrate some level of self-efficacy. Adolescents in schools are expected to have high levels of academic self-efficacy, which is the conviction that they have the ability and capacity to perform well on their examinations. These are essential indicators of success in a variety of life pursuits. In other words, in-school adolescents should interact, maintain positive social contact and relationships with their peers, classmates, and teachers, and achieve well academically. However, it has been discovered that certain adolescents have extremely low levels of academic self-efficacy. Such adolescents rarely connect with their peers or teachers.

There is a wealth of empirical evidence supporting the efficacy of some psychological interventions in improving academic self-efficacy in individuals. Adolescents with low academic self-efficacy are unable to seek help from others; they struggle to ask for clarifications or questions on perplexing or unclear matters, as well as initiate, participate in, and end conversations or discussions. All of these factors tend to impede their learning and can result in lower academic achievement, overall well-being, and relationships with others.

Findings from western and Nigerian literature imply that techniques such as REBT may help to improve students' academic self-efficacy. This study, therefore, empirically evaluated the effectiveness of REBT in enhancing of academic self-efficacy. The problem of this study, therefore, put in a question form is: what is the effectiveness of rational emotive behaviour therapy in enhancing academic self-efficacy among in-school adolescents in Abia State?

### **Purpose of the Study**

**Specifically, the objectives of the study are to:**

- i) determine the mean score difference in the level of academic self-efficacy among in-school adolescents exposed to rational emotive behaviour therapy and control group at post-test.
- ii) find out the mean score difference in the level of academic self-efficacy among in-school adolescents exposed to rational emotive behaviour therapy and control group at post-test by gender.

### Research Questions

**The research questions were posed and answered to guide the study:**

**RQ<sub>1</sub>:** What is the mean score difference in the level of academic self-efficacy among in-school adolescents exposed to rational emotive behaviour therapy and control group at post-test.?

**RQ<sub>2</sub>:** What is out the mean score difference in the level of academic self-efficacy among in-school adolescents exposed to rational emotive behaviour therapy and control group at post-test by gender.

### Hypotheses

The following null hypotheses were formulated and tested at 0.05 level of significance to further guide the study.

**HO<sub>1</sub>:** There is no significant mean score difference in the level of academic self-efficacy among in-school adolescents exposed to rational emotive behaviour therapy and control group at post-test.?

**HO<sub>2</sub>:** There is no significant mean score difference in the level of academic self-efficacy among in-school adolescents exposed to rational emotive behaviour therapy and control group at post-test by gender.

### Methodology

The study was conducted in secondary schools in Abia State in the 2023/2024 academic session. The study adopted a quasi-experimental pretest, posttest, non-randomized control group design.

The population of the study comprised 3459 in-school adolescents in Umuahia North L.G.A, Abia State. The sample for this study comprised 24 subjects purposively sampled from the population with low academic self-efficacy as determined by their responses on the Academic Self-Efficacy Identification Questionnaire (ASIQ). Subjects with a score below 2.50 were judged to have low levels of academic self-efficacy and were purposively recruited for the study. There is one experimental group (6 males and 6 females) and one control group (6 males and 6 females), with gender serving as a moderator variable.

The ASIQ is a 22-item questionnaire designed to assess the level of academic self-efficacy of in-school adolescents. The ASIQ is divided into two components. Section one elicited demographic data. Section two has 22 items structured in clusters for identifying and measuring the level of academic self-efficacy. The ASIQ is a four-point rating scale of Very High level (VHL), High level (HL), Low level (LL), and Very Low level (VLL), with weights of 4, 3, 2, and 1, respectively. The ASIQ's negative components were reverse-scored. The cut-off mean score was below 2.50.

Three research professionals in the College of Education at Michael Okpara University of Agriculture in Umudike, Abia State, Nigeria, face validated the initial draft of ASIQ, alongside with the purpose of the study, research questions, and hypotheses. The experts reviewed the items to determine the instrument's suitability, language construction, coverage, clarity, and relevance. The final draft of the instrument was produced after considering the experts' comments, suggestions, and adjustments.

The reliability of ASIQ was determined using Pearson's Product Moment Correlation with an index of 0.84 while Cronbach alpha method was used to determine the internal consistency of the instrument which yielded a score of 0.86 indicating its suitability for the study. The study's data gathering was primarily divided into three phases:

**Pre-treatment Phase:** This phase included two pre-treatment sessions of preliminary introductions before treatment. The phase included our pre-treatment evaluations to identify students with low academic self-efficacy to generate the baseline data. The individuals were purposively assigned to one of two treatment groups: REBT and control group.

**Treatment Phase:** This phase dealt with the actual exposure of the techniques of REBT to the treatment group while the control group was as a waitlist group. The treatment group gets six sessions, each lasting 45 minutes. The basic techniques of REBT as well as a methodical outline of the group's session activities are provided below:

### **Session one: initial counselling establishment issues and setting of goals**

This was an introductory session. This session was used to create rapport, discuss confidentiality, explain the duties and obligations of the counsellor and client, and address any initial establishment difficulties. The researcher aided the subjects in setting counselling goals, including short- and long-term goals.

### **Session Two – Imaginal Disputation Technique of REBT**

The session began with motivation for the subject and a review of the prior session. Subjects were requested to submit their last-session assignments, which were then discussed. After recognizing/realizing their illogical idea and an orientation toward REBT, the researcher offered the first REBT procedure, cognitive disputation followed by imaginal disputation.

### **Session Three – Behavioural Disputation Technique of REBT**

The session began with motivating the subjects. In this session, the researcher and subjects reviewed and discussed the tasks and assignments assigned to them, and the behavioural disputation technique was explained; it involves having the client behave in a way that is opposed to how they would have responded to the circumstance.

### **Session four – Emotional control technique of REBT**

The session began with the subject's motivation. The activities from the previous session were reviewed. Use of emotional control cards was explained and practiced in therapy. **Session five – Confrontation and encouragement technique of REBT**

The session began with motivating the subjects. This session saw the continuation of progress verification. Subjects' tasks and assignments were reviewed. The subjects were introduced to



the confrontation approach. For example, confrontation is an attempt by the therapist to gently bring to the clients' attention anything that they may have purposefully neglected or carefully avoided.

### Session six – Review of activities in all sessions

This was the last stage of the rational emotive behaviour therapy treatment regimen. The session began with the subjects' motivation. The subjects were lead to rehearse the entire process highlighting their goals vis a vis the extent they have been achieved. The subjects were reinforced for their active participation in the process. They were instructed to come in a week's time to complete the ASIQ reshuffled to get their posttest data. The respondents' responses were assessed, and the results were compared to their pre-test ASIQ scores. The analysis of covariance (ANCOVA) was used as a statistical control measure. It also has the potential to improve the power of a statistical test. The data acquired for the study were statistically evaluated using mean and standard deviation to answer the research questions, and Analysis of Covariance (ANCOVA) was used to test the null hypotheses at the 0.05 level of significance, as shown in tables 1–4.

### Results

**Research Question I:** What is the mean score difference in the level of academic self-efficacy among in-school adolescents exposed to rational emotive behaviour therapy and control group at post-test.?

**Table 1:** Mean and Standard Deviation of the mean score difference in the level of academic Self- efficacy among in-school adolescents exposed to rational emotive behaviour therapy and control group at post-test.?

Source		Pre-test		Post-test		Mean Gain	Mean difference
Groups	N	$\bar{X}$	SD	$\bar{X}$	SD		
REBT	6	1.50	.52	3.42	.38	1.92	1.75
Control	6	1.50	.47	1.67	.42	.17	

Data in Table 1 revealed that the subjects with low academic self-efficacy who were exposed to rational emotive behaviour therapy (REBT) had a pre-test mean score of 1.50 with a standard deviation of .52 and a post-test mean score of 3.42 with a standard deviation of .38. Similarly, the subjects with low academic self-efficacy in the control group had a pre-test mean score of 1.50 with a standard deviation of .47 and a post-test mean score of 1.67 with a standard deviation of .42. The table also showed that respondents with low academic self-efficacy who were exposed to rational emotive behaviour therapy (REBT) had a mean increase of 1.92, whereas those in the control group had .17. The results showed that using rational emotive behavior therapy (REBT) boosted the level of academic self-efficacy of in-school adolescents at the posttest.

**Hypothesis 1:** There is no significant mean score difference in the level of academic self-efficacy among in-school adolescents exposed to rational emotive behaviour therapy and control group at post-test.?

**Table 2:** Analysis of Covariance (ANCOVA) on mean score difference in the level of academic self-efficacy among in-school adolescents exposed to rational emotive behaviour therapy and control group at post-test.?

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	2.067 <sup>a</sup>	2	1.033	2.583	.130
Intercept	.022	1	.022	.055	.820
Pre	.400	1	.400	1.000	.343
Group	2.057	1	2.057	5.143	.050
Error	3.600	9	.400		
Total	126.000	12			
Corrected Total	5.667	11			

The results in Table 2 revealed that the F-calculated value of 5.143 in relation to the treatment has a main effect with a probability value of .050 with 2 and 9 degrees of freedom, and is thus significant at the 0.05 level. This suggested that exposing students with low academic self-efficacy to rational emotive behaviour therapy (REBT) significantly boosted their academic self-efficacy. As a result, the null hypothesis was rejected.

**Research Question II:** What is the mean score in enhancing academic self-efficacy between in-school adolescents treated with rational emotive behaviour therapy based on gender at posttest?

**Table 3:** Mean and Standard deviation on mean score difference in the level of academic self-efficacy

among in-school adolescents exposed to rational emotive behaviour therapy and control group at post-test by gender.

Groups	Pretest			Posttest		Mean gain	Mean difference
	N	$\bar{X}$	SD	$\bar{X}$	SD		
Male	12	1.86	0.34	3.22	0.44	1.36	-0.4
Female	12	1.14	0.45	3.62	0.36	2.48	

Table 3 shows the mean academic self-efficacy score of male and female adolescents in the treatment group. The male students in the treatment who received rational emotive behaviour therapy (REBT) had a mean score of 1.86 with a standard deviation of 0.34 at pre-test and 3.22 with a standard deviation of 0.44 at post-test with a post mean difference of 1.36. Female adolescents in the treatment group had mean academic self-efficacy scores of 1.14 with standard deviation of 0.45 at pre-test and 3.62 with standard deviation of 0.36 at post-test and post mean difference of 2.48. The findings demonstrate that male and female students with low academic self-efficacy exposed to rational emotive behavior therapy (REBT) had slightly different levels of academic self-efficacy enhancement.

**Hypothesis 2:** There is no significant mean score difference in the level of academic self-efficacy among in-school adolescents exposed to rational emotive behaviour therapy and control group at post-test by gender.

**Table 4.** Analysis of Covariance (ANCOVA) on mean score difference in the level of academic self-

efficacy among in-school adolescents exposed to rational emotive behaviour therapy and control group at post-test by gender.

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	1023.134 <sup>a</sup>	2	511.567	1.625	.000
Intercept	3866.093	1	3866.093	12.280	.001
Pretest	546.329	1	546.329	1.735	.020
Gender	522.910	1	522.910	1.661	.121
Error	2518.600	8	314.825		
Total	55790.000	10			
Corrected Total	5561.733	9			

Table 4 shows a -calculated value of 1.66 and a P-value of 0.12, which exceeds the alpha value of 0.05. This, however, means that the hypothesis of no substantial effect was not rejected. As a result, there is no significant difference in the post-test mean scores on academic self-efficacy enhancement for male and female students exposed to rational emotive behavior therapy (REBT).

### Discussion of Findings

The study found that REBT effectively improved the low academic self-efficacy of in-school adolescents. The experimental group demonstrated a marked increase in ASE scores after the intervention, while the control group, exhibited less substantial improvements. These findings provide compelling evidence of the effectiveness of REBT in fostering students' academic confidence and overall academic performance. Additionally, the structured nature of REBT sessions allowed students to engage in reflective thinking, where they evaluated their thoughts, feelings, and behaviours related to academic tasks (Homayon et al., 2023). This cognitive restructuring process is a major component of REBT and may likely have contributed to the significant improvements in ASE observed in the experimental group.

The results of this study are consistent with previous research on the effectiveness of cognitive-behavioral interventions in educational settings. Hasanah and Mariyati (2023) study demonstrated

that CBT interventions helped students enhance their academic performance. Obi and Nicholas (2018) study demonstrated the efficacy of REBT on academic stress among undergraduates.

The study also found no significant interaction effect of gender and therapy (REBT) on academic self-efficacy of in-school adolescents, as both male and female students exposed to the REBT responded equally to the treatment though the female gender seem to have had better outcome. The findings indicated that the changes in behaviours of in-school adolescents were as a result of the treatment administered.

## **Conclusion**

The study's findings led to the conclusion that rational emotive behaviour therapy greatly increased the level of academic self-efficacy of in-school adolescents found to have low self-efficacy. This was demonstrated by the result that in-school adolescents exposed to REBT had a greater mean academic self-efficacy than those in the control group. Based on the findings of this study, it can be inferred that REBT intervention plays a significant role in enhancing the level of academic self-efficacy of in-school adolescents exposed to REBT. These results present promising implications for the utilization of REBT in academic challenges of students.

## **Recommendations**

**The following recommendations are made:**

- 1) Professional counsellors should utilize behaviour modification techniques found to be effective like REBT to assist students to improve their academic self-efficacy and other related challenges.
- 2) The government should ensure that effective and functional counselling programme goes on in all levels of the educational system by employing qualified counsellors and equipping them adequately to perform the expected roles.
- 3) Teachers and other stakeholders should refer students found to be exhibiting low academic self-efficacy for counselling.

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