

# Effect of Cognitive Restructuring on Anxiety among Students in College of Arabic and Islamic Legal Studies Ilorin, Kwara State, Nigeria

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Effect, Cognitive Restructuring, Anxiety, College of Arabic and Islamic Legal Studies Ilorin

## Abstract

This study investigated the Effect of Cognitive Restructuring on Anxiety among students in College of Arabic and Islamic Legal Studies Ilorin, Kwara State, Nigeria. The study adopted a non-equivalent pre-test post-test design. The population of this study was twenty (20) students that was purposively selected from three department in the college. Participants were exposed to eight weeks of cognitive restructuring training. One instrument: Burns Anxiety Inventory (BAI) ( $\alpha = 0.79$ ) was used for the pre-test and post-test. The study was guided by three (3) research questions and three (3) hypotheses. Bio data were described and the research questions were answered using percentage, mean and standard deviation while the hypotheses are tested using

paired t-test. The hypotheses were tested at 0.05 level of significance. Findings of this study revealed that; There was a significant effect of cognitive restructuring on psychological anxiety at post-test level ( $t = 8.315, p < 0.05$ ). Also There is no significant effect of cognitive restructuring on cognitive anxiety at post-test level ( $t = 11.87, P < 0.05$ ) compared to the pre-test score. There is no significant effect of cognitive restructuring on physical anxiety at post-test level ( $t = 5.810, P > 0.05$ ). In conclusion it was therefore recommended that psychologist and counsellors should be encouraged to adapt cognitive restructuring in handling anxiety problems among senior secondary school students.

## Introduction

Anxiety is a complex psychological and behavioural state that affects every human endeavour throughout one's lifetime. Anxiety is a normal reaction to certain situations that enable us to cope with everyday life situation. Anxiety is a mental sensitivity of uneasiness or distress in response to school circumstances that is perceived negatively. Students are known to become anxious whenever it comes to academic performance and academic achievement. It is extremely common in childhood, adolescence and can negatively interfere with general wellbeing, social life, academic performance and development of social skills Jamiu, (2025). Everyone sometimes experiences anxiety in one form or another and in varying degrees. It involves a pattern of physiological and psychological reactions like feeling of stress and emotions defences (Tejpal, 2018). Bako, (2019) defined anxiety as a psychological state characterized by cognitive, somatic, emotional and behavioural components which combine to create sweating,

dizziness, headaches, racing heartbeats, nausea, fidgeting, drumming on a desk, fear, apprehension and worry. Unlike fear, anxiety involves a more general or diffused emotional reaction beyond simple fear that is out of proportion to threats from the environment.

Anxiety disorders are the most common mental disorders among children and adolescents (Bako, 2019). Igbo et al (2018) stated that anxiety symptoms are associated with impairment of memory and cognitive functions and can contribute to poor school performance and academic failure. Students with anxiety disorder exhibit a passive attitude in their studies such as lack of interest in learning, poor performance in exams, and do poorly on assignments. The anxiety's psychological symptoms among students include feeling nervous before a tutorial class, panicking, going blank during a test, feeling helpless while doing assignments, or lack interest in a difficult subject whereas the physiological symptoms include sweaty palms, cold, nervousness, panic, fast pace of breathing, racing heartbeat, or an upset stomach. These disorders affect how we feel and behave, and they can manifest real physical symptoms.

Anxiety is not a bad thing. It is true that a high level of anxiety interferes with concentration and memory, which are critical for academic success. Without any anxiety, however, most student would lack the motivation to study for exams, lecturers will not write papers, or do daily activities Jamiu, (2025). Martinez (2017) opined that a mild to moderate amount of anxiety is normal and even beneficial as it can motivate people to prepare for an upcoming event and can help keep them focused on the task ahead while too little or too much anxiety can cause problems especially in academics.

Anxiety is an overwhelming feeling of disturbance and distress among students globally and can be a devastating problem for them that may impair performance and their wellbeing later in life (Jamiu, 2023). This has over time made researchers carryout studies to ascertain the factors that cause of anxiety among students. Deb, Strodl and Sun (2017) states that anxiety is as a result of poor social problem-solving skill. Student tends to become

anxious when they try to find an adaptive ways of coping with everyday situations that are considered problematic. They further stressed that factor such as cognitive distortion causes anxiety among adolescents. Another major cause of anxiety identified by different researcher is family conflict. Family is considered as the first agent of civilization. When there is something wrong with it, it will go a long way in affecting the student.

Studies have shown over time that psychotherapy is the most effective way of dealing with the challenges associated with anxiety. According to Ghamari, Rafeie and Kiani (2017) Cognitive Behavioural Therapy (CBT) has represented an innovative psychotherapy approach since its introduction more than 50 years ago; it has continuously developed and overall, it has been highly successful in its use to reduce general anxiety. Cognitive restructuring is a core part of Cognitive Behavioural Therapy (CBT). Beck (as cited in Yunusa, Abdullahi, Oliagba, Sani & Abdulwahid, 2019) posit that cognitive restructuring involve the process of re-orienting one's thought process to reality, and of requiring one's mind to think truthfully, factually and logically.

Cognitive restructuring is a talk therapy that help one to reframe an earlier negative or irrational belief or understanding one had about things which inhibits the behaviour of set goals or which discouraged one in his/her effort to change his/her behaviour in life (Yunusa et al, 2019). In cognitive restructuring technique, the therapist is expected to involve the patient in setting realistic goals and taking responsibilities for action and thought. Jeffry, (2017) The patient is educated on the concept of faulty thinking and new ways and ideas are generated to develop a positive outlook of self-experiences and environment. Nicki, (2017). In therapy the patient learns to apply cognitive restructuring techniques so that negatively distorted thoughts underlying anxiety can be corrected and replaced with more logical and adaptive thinking. Kendra, (2018) said that, in application to anxiety, therefore, it is the fear of the negative outcome in academic performance that makes students anxious about anything that has to do with college.

## **Statement of the Problem**

According to a survey carried out by American Psychological Association (2016) on students mental health as a growing concern, the findings shows that anxiety is the top presenting concern among students ahead of other mental issues such as depression. This is obviously a serious concern because this could hamper the academic success and the general wellbeing of a student. Studies have shown that the average student and students with learning disabilities are not the only once suffering from anxiety, even the gifted students show symptoms of anxiety.

Studies have shown that anxiety in college students reach its peak when students cumulative growth point average (CGPA) are expected to show the better performance. The performance of students in college examinations has remained a serious issue of concern to all stakeholders. Stakeholders have continuously identified factors such as quality and quantity of lecturers, standard in college, parental influence, inadequate infrastructure, fallen standard of education, corruption, government policies on education, social media influence among others as the major contributors to mass failure has showing in their CGPA with only few pointing at the effect of psychological factors of the student. This has motivated the researcher to carry out his research work on one of the major psychological factor that affects students' performance in colleges. Although it cannot be eradicated in its entirety but reducing it to the nearest minimum is very important for better academic performance.

## **Objective**

The objectives of this study are to determine:

1. The effect of cognitive restructuring on psychological anxiety among students in College of Arabic and Islamic Legal Studies Ilorin, Kwara State, Nigeria.
2. The effect of cognitive restructuring on cognitive anxiety among students in College of Arabic and Islamic Legal Studies Ilorin, Kwara State, Nigeria.

3. The effect of cognitive restructuring on physical anxiety among students in College of Arabic and Islamic Legal Studies Ilorin, Kwara State, Nigeria.

### **Research Questions**

The following research questions were raised in line with the objectives:

1. What is the effect of cognitive restructuring on psychological anxiety among students in College of Arabic and Islamic Legal Studies Ilorin, Kwara State, Nigeria?
2. What is the effect of cognitive restructuring on cognitive anxiety among students in College of Arabic and Islamic Legal Studies Ilorin, Kwara State, Nigeria?
3. What is the effect of cognitive restructuring on the physical anxiety among students in College of Arabic and Islamic Legal Studies Ilorin, Kwara State, Nigeria?

### **Research Hypothesis**

In line with the research questions raised, the research hypotheses were formulated;

1. There is no significant difference of cognitive restructuring on psychological anxiety at pre-test and post-test among students in College of Arabic and Islamic Legal Studies Ilorin, Kwara State, Nigeria.
2. There is no significant difference of cognitive restructuring on cognitive anxiety at pre-test and post-test among students in College of Arabic and Islamic Legal Studies Ilorin, Kwara State, Nigeria
3. There is no significant difference of cognitive restructuring on physical anxiety at pre-test and post-test among students in College of Arabic and Islamic Legal Studies Ilorin, Kwara State, Nigeria

### **Methodology**

The researchers used a Pre-test-Post-test design. The pre-test and post-test design involved the manipulation of one or more independent variables, but there was no random assignment of subjects to conditions and no control

group. This is because the study covered fewer participants under control condition. The unique strength of this design is the use of pre-test, which allows the researcher to perform various analyses that might be helpful in making valid inferences about the effects of the independent variable (Palak, Kusum & Payal, 2017). This is considered appropriate because the research involves a treatment group that were exposed to cognitive restructuring. The design is symbolically presented follows:

$$\begin{array}{ccc} O_1 & X & O_2 \\ O_3 & & O_4 \end{array}$$

$O_1$  and  $O_3$  refer to the observation before commencement of experiment (pre-test).

$O_2$  and  $O_4$  refer to the observation after commencement of experiment or treatment (post-test).

X refers to the treatment variable.

After the conclusion of the counselling, the first step taken in this study was to analyse the completed instruments. Data collected from the study were analysed using both the descriptive and inferential statistical methods. The descriptive statistics that were used are frequency counts, percentage, measures of central tendency and measures of dispersion or variability. The inferential statistics that was used is the t-Test. The t-test statistical tool was used to test the three hypotheses for the significant difference in the degree of severity of anxiety before and after treatment with cognitive restructuring among the participants. The Statistical Package for the Social Sciences (SPSS) will be employed for the actual data presentation and analysis.

## Results

**Research Question 1:** What is the effect of cognitive restructuring on the psychological anxiety among students in College of Arabic and Islamic Legal Studies Ilorin, Kwara State, Nigeria?

**Table 1: Pre-Test and Post-Test on Psychological Anxiety Mean Score of Respondents**

| Psychological Anxiety | N  | Mean | Std. Deviation |
|-----------------------|----|------|----------------|
| Pre-test              | 10 | 21.4 | 2.99           |
| Post-test             | 10 | 11.1 | 2.64           |

Table 1 confirms that there was a difference between the levels of psychological anxiety among the college students before and after the cognitive restructuring treatment, while the mean score of psychological anxiety was up to 21.4 before treatment, the effect of the treatment dropped down the mean score to 11.1. The difference of 10.3 mean scores therefore manifests the efficacy of the cognitive restructuring treatment. The standard deviation on the other hand also dropped after the treatment which also strengthens the effectiveness of the treatment. Therefore we can answer the question that the difference between the levels of psychological anxiety of the students after the cognitive restructuring treatment was adequate to declare the treatment effective.

**Research Question 2:** What is the effect of cognitive restructuring on cognitive anxiety among students in College of Arabic and Islamic Legal Studies Ilorin, Kwara State, Nigeria?

**Table 2: Pre-test and Post-test of Cognitive Anxiety Mean Score of Respondents**

| Cognitive Anxiety | N  | Mean | Std. Deviation |
|-------------------|----|------|----------------|
| Pre-Test          | 10 | 19.3 | 2.50           |
| Post-Test         | 10 | 9.9  | 2.02           |

Table 2 confirms that there was a difference between the levels of cognitive anxiety among the college students before and after the cognitive restructuring treatment, while the mean score of fear was up to 19.3 before



treatment, the effect of the treatment dropped down the mean score to 9.9. The difference of 9.4 mean scores therefore manifests the efficacy of the cognitive restructuring treatment. The standard deviation on the other hand also dropped after the treatment which also strengthens the effectiveness of the treatment. Therefore we can answer the question that the difference between the levels of cognitive anxiety of the students after the cognitive restructuring treatment was adequate to declare the treatment effective.

**Research Question 3:** What is the effect of cognitive restructuring on physical anxiety among students in College of Arabic and Islamic Legal Studies Ilorin, Kwara State, Nigeria?

**Table 3: Pre-test and Post-test Physical Anxiety Mean Score of Respondents**

| Physical Anxiety | N  | Mean | Std. Deviation |
|------------------|----|------|----------------|
| Pre-Test         | 10 | 18.0 | 2.0            |
| Post-Test        | 10 | 11.4 | 4.14           |

Table 3 confirms that there was a difference between the levels of physical anxiety among the college students before and after the cognitive restructuring treatment, while the mean score of physical anxiety was up to 18.0 before treatment, the effect of the treatment dropped down the mean score to 11.4. The difference of 6.6 mean scores therefore manifests the efficacy of the cognitive restructuring treatment. The standard deviation on the other hand also dropped after the treatment which also strengthens the effectiveness of the treatment. Therefore we can answer the question that the difference between the levels of physical anxiety of the students after the cognitive restructuring treatment was adequate to declare the treatment effective.

## Research Hypotheses

The result of tested hypotheses as well as the interpretation of the data that was analysed.

**Hypothesis One;** There is no significant difference of cognitive restructuring on psychological anxiety at pre-test and post-test among students in College of Arabic and Islamic Legal Studies Ilorin, Kwara State, Nigeria.

The response of the respondents were collected and analysed to find out the effect of cognitive restructuring on psychological anxiety. A paired t-Test statistical procedure was employed to achieve this and the result can be seen as follow.

**Table 4.** t-test for Paired Sample between the Pre-Test and Post-Test of Respondents Level of Psychological Anxiety exposed to Cognitive Restructuring in students in College of Arabic and Islamic Legal Studies Ilorin, Kwara State, Nigeria

| Psychological Anxiety | N  | Mean Score | Std. Dev. | d.F | t-Cal | p(sig) |
|-----------------------|----|------------|-----------|-----|-------|--------|
| Pre test              | 10 | 21.4       | 2.99      | 9   | 8.315 | 0.000  |
| Post test             | 10 | 11.1       | 2.64      |     |       |        |

\*Significant at  $p \leq 0.05$

From table 4 above, the mean difference of 10.3 between the pre-test and post-test score indicates the effectiveness of the technique. We can also observe that there was a drop in standard deviation from 2.99 to 2.64. This further strengthens the decision of this hypothesis. We can therefore say that since  $p=0.000 < 0.05$  alpha level of significance and the calculated t value of 8.315 is higher than the t critical value of 2.262 at 9 df, the null hypothesis which says there is no significant difference in the effect of cognitive restructuring on the psychological anxiety among students in College of

Arabic and Islamic Legal Studies Ilorin, Kwara State, Nigeria at pre-test and post-test level is rejected. Hence, the cognitive restructuring technique has significantly contributed in reducing the psychological anxiety among students.

**Hypothesis Two;** There is no significant difference of cognitive restructuring on cognitive anxiety at pre-test and post-test among students in College of Arabic and Islamic Legal Studies Ilorin, Kwara State, Nigeria. The response of the respondents were collected and analysed to find out the effect of cognitive restructuring on cognitive anxiety. A paired t-Test statistical procedure was employed to achieve this and the result can be seen in table 5.

**Table 5** t-test for Paired Sample between the Pre-Test and Post-Test of Respondents level of Cognitive Anxiety exposed to Cognitive Restructuring in students in College of Arabic and Islamic Legal Studies Ilorin, Kwara State, Nigeria

| Cognitive Anxiety | N  | Mean Score | Std. Dev. | d.F | t-Cal | p(sig) |
|-------------------|----|------------|-----------|-----|-------|--------|
| Pre-test          | 10 | 19.3       | 2.50      | 9   | 11.87 | .000   |
| Post-test         | 10 | 9.9        | 2.02      |     |       |        |

\*Significant at  $p \leq 0.05$

From table 5 above, the mean difference of 9.4 between the pre-test and post-test score indicates the effectiveness of the cognitive restructuring technique on cognitive anxiety. We can also observe that there was a drop in standard deviation from 2.50 to 2.02. This further strengthens the decision of this hypothesis. We can therefore say that since  $p=0.000 < 0.05$  alpha level of significance and the calculated t value of 11.87 is higher than the t critical value of 2.262 at 9 df, the null hypothesis which says there is no significant difference in the effect of cognitive restructuring on cognitive anxiety among students in College of Arabic and Islamic Legal Studies Ilorin, Kwara State,

Nigeria at pre-test and post-test level is rejected. Hence, the cognitive restructuring technique has significantly contributed in reducing the cognitive anxiety among students.

**Hypothesis Three;** There is no significant difference of cognitive restructuring on physical anxiety at pre-test and post-test level among students in College of Arabic and Islamic Legal Studies Ilorin, Kwara State, Nigeria.

The response of the respondents were collected and analysed to find out the effect of cognitive restructuring on physical anxiety. A paired t-Test statistical procedure was employed to achieve this and the result can be seen bellow.

**Table 6.** t-test for Paired Sample between the Pre-Test and Post-Test of Respondents level of Physical Anxiety exposed to Cognitive Restructuring students in College of Arabic and Islamic Legal Studies Ilorin, Kwara State, Nigeria

| Physical Anxiety | N  | Mean Score | Std. Dev. | d.F | t-Cal | p(sig) |
|------------------|----|------------|-----------|-----|-------|--------|
| Pre-test         | 10 | 18.7       | 2.00      | 9   | 5.810 | .000   |
| Post-test        | 10 | 11.4       | 4.14      |     |       |        |

\*Significant at  $p \leq 0.05$

From table 6 above, the mean difference of 7.3 between the pre-test and post-test score indicates the effectiveness of the technique. This further strengthens the decision of this hypothesis. We can therefore say that since  $p=0.000 < 0.05$  alpha level of significance and the calculated t value of 5.810 is higher than the t critical value of 2.262 at 9 df, the null hypothesis which says there is no significant difference in the effect of cognitive restructuring on physical anxiety among students in College of Arabic and Islamic Legal Studies Ilorin, Kwara State, Nigeria at pre-test and post-test level is rejected.

Hence, the cognitive restructuring technique has significantly contributed in reducing the physical anxiety among students as shown in the table above.

### **Discussions**

This work was set to determine the effects of cognitive restructuring on anxiety among students in College of Arabic and Islamic Legal Studies Ilorin, Kwara State, Nigeria. The result of tested hypotheses from this study revealed that a statistical significant difference was found between students in College of Arabic and Islamic Legal Studies Ilorin, Kwara State, Nigeria exposed to cognitive restructuring at before and after treatment. The observation from the finding is that, students who were exposed to the treatment programme of the cognitive restructuring this finding agrees with the findings Pravakar (2018) which showed that cognitive restructuring was effective in reducing the anxiety disorders. Similarly the study also supports the findings of Bako (2019) on the effectiveness of cognitive restructuring in reducing anxiety among students in College of Arabic and Islamic Legal Studies Ilorin, Kwara State, Nigeria. Jamiu, (2023) also posited that the therapeutic goal is to help clients develop a more positive outlook and the maintenance of positive cognitions by restructuring the irrational thoughts and beliefs they hold.

### **Conclusion**

Based on the findings of this study, the researchers concluded that, the use of cognitive restructuring techniques in helping students to reduce their anxiety level has been very successful, considering the significant drop in the mean scores of the students' anxiety after the treatments. The researcher therefore conclude that cognitive restructuring is very effective technique in reducing anxiety of students. It may not be out of place to conclude too that a great percentage of the rampant poor academic failure and the continued poor academic performance among students in College of Arabic and Islamic Legal Studies Ilorin, Kwara State, Nigeria is traceable to anxiety. The

reassuring fact which the result of this study has confirmed, however, is that effective therapy can successfully control the behaviour problem.

## Recommendations

In line with the above findings, the researcher recommended that:

1. Psychologist and counsellors should be encouraged to adapt cognitive restructuring in handling anxiety problems among students in College of Arabic and Islamic Legal Studies Ilorin, Kwara State, Nigeria.
2. Seminars, workshops and conferences should be holding on cognitive restructuring in handling component of anxiety problems among students in College of Arabic and Islamic Legal Studies Ilorin, Kwara State, Nigeria.
3. And recommends that lecturers, parents, governments and all stakeholders in education must join hands with counsellors to reduce the cognitive components of anxiety to a minimal level.

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