

## ***Effect of Cognitive Restructuring Technique on Social Anxiety among Senior Secondary School Students in Suleja Education Zone, Niger State, Nigeria***

**<sup>1</sup>Usman Galadima Muhammad**  
[muhammadusmangaladima@gmail.com](mailto:muhammadusmangaladima@gmail.com)

**<sup>1</sup>Nabila Ahmad Yusuf**  
[nabilayusuf240@gmail.com](mailto:nabilayusuf240@gmail.com)

**<sup>1</sup>Prof Mustapha Ibrahim Abdullahi**  
[mustaphaia@gmail.com](mailto:mustaphaia@gmail.com)

<sup>1</sup>Department of Educational Psychology and Counselling  
Faculty of Education  
Ahmadu Bello University, Zaria

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### **Abstract**

*This study determined the effect of Cognitive Restructuring technique on Social Anxiety among Senior Secondary School Students in Suleja Education Zone, Niger State, Nigeria. The study was guided by two research objectives, two research questions and two null hypotheses. The study employed quasi experimental design involving pretest and posttest. The population of the study comprised of 35 male and female SS2 students identified with social anxiety symptoms from Government Day Secondary School Lambata Gurara Local Government in Suleja Education Zone of Niger State. Sixteen (16) selected students that is, 8 male and 8 female constituted the sample and were used for the study. The 35 students were identified using Social Anxiety Scale (SAS) developed by Yahaya and Nyarko-Sampson. The null hypotheses were tested using paired sampled t-test. The findings of the study revealed that Cognitive Restructuring technique has significant effect on Social Anxiety among male students with  $t=3.238$  and  $p=.005$ . Cognitive Restructuring technique also has significant effect on Social Anxiety among female students with  $t=7.087$  and  $p=.000$ . The study therefore recommended that school counsellors and psychologists should be encouraged to use Cognitive Restructuring Technique in handling both male and female secondary school students with Social Anxiety.*

**Keywords:** cognitive, restructuring, social, anxiety, male, female

### **Introduction**

The prevalence of social anxiety within Suleja education zone can be witnessed throughout secondary and tertiary institutions and is causing discomfort for the students leading to their lack of academic progress and denying them their future ambition. In many of the secondary schools in Suleja education zone of Niger state, Nigeria, many students tend to experience a number of physical symptoms of social anxiety such as stomach ache or complaint about feeling ill in anticipation of or, when expected to be in a social or performance based situations (Pour, 2014). In addition, the students may cry,

whine, freeze or even cling to teachers or their parent (Pour, 2014). These students sometimes may even refuse to participate in various school activities or to attend school (Ngwoke & Numode, 2013), and if they are forced to go, they may refuse to speak to the teachers, peers or administrative staff in the school.

Unfortunately, the prevailing belief of many teachers, especially in Suleja education zone, is that some students are simply shy or introvert and prefer not to participate in school activities like their peers (Ghamari, Rafeie, & Kiani, 2015). This is not true. Students with social anxiety want to be in school and participate in school activities that have performance aspect such as quiz, debate, drama and sports. However, social anxiety prevents them from doing so and because they are often quiet and reserved, they may go unnoticed by teachers who believe they are shy or introvert students who prefer to be as they are.

This problem is becoming worrisome among parents, students, teachers, school counsellors and psychologists, educational policy makers and even government. These concerned persons have also made several efforts to address the problem using advice, different techniques, punishment and even medication but the problem still appears to be on the increase.

Counselling programmes in the various schools is still left in the hands of unprofessional personnel, especially in Suleja education zone, such as career masters, discipline masters and sometimes religious teachers (Muhammad, 2016). There is shortage of professional counsellors and psychologists in the various schools to address the problem among students specifically in Suleja education zone of Niger state, Nigeria. The few existing school counsellors and psychologists have tried to address the problem through individual and group counselling using different techniques but the problem still persists. The teachers also have employed various means of addressing the problem such as sending students out of class during lessons, engaging them in manual labour, flogging them, suspending and even expelling them from school (Usman, 2015). But all these designed measures have not yielded positive outcome, because these measures are impositions that are external to the students. For these reasons, the researchers sought to determine the best way to address the problem of social anxiety particularly among male and female senior secondary school students in Suleja education zone of Niger state, Nigeria in order to ensure that the students would not only achieve their set academic objectives but to also develop a socially and emotionally acceptable attributes in the larger society.

Despite all efforts made by various stakeholders to curb social anxiety among male and female students, the problem still remains a source of worry and concern to students, parents, school counsellors and psychologists, teachers and other stakeholders. These problems and several others constituted the reasons why the researchers determined the effect of cognitive restructuring technique on social anxiety among male and female senior secondary school students in Suleja education zone of Niger state, Nigeria.

### **Objectives of the study**

This study was guided by the following objectives:

1. To determine the effect of cognitive restructuring technique on social anxiety among male senior secondary school students in Suleja Education zone, Niger state, Nigeria.
2. To determine the effect of cognitive restructuring technique on social anxiety among female senior secondary school students in Suleja Education zone, Niger state, Nigeria.

### **Hypotheses**

The following null hypotheses were formulated and tested:

**Ho1:** There is no significant difference in the mean score between pre-test and post-test social anxiety among male senior secondary school students in Suleja Education Zone after being exposed to Cognitive Restructuring technique.

**Ho2:** There is no significant difference in the mean score between pre-test and post-test social anxiety among female senior secondary school students in Suleja Education Zone after being exposed to Cognitive Restructuring technique.

### **Methodology**

Quasi-experimental design involving pre-test post-test group only was adopted for this study. Quasi-experimental design involves the manipulation of one or more variables without random assignment of subjects to conditions. Most educational researches use quasi experimental design because they must be conducted on real students in schools without disrupting the educational process (Emmanuel, 2013). The researchers also adopted quasi experimental design because it yields most scientific and more reliable results than survey and other designs (Galadima as cited in Lawal, 2016). The design is graphically presented as follows:

#### **Pretest-posttest treatment group only**

$O_1 \longrightarrow \text{X} \longrightarrow O_2$

Keys:

$O_1$ : refers to the observation before commencement of the experiment (pretest)

$O_2$ : refers to the observation after commencement of the experiment or treatment (posttest)

X: refers to the treatment variable

The population of this study comprised of male and female students in public senior secondary schools in Suleja education zone of Niger state, Nigeria. Statistical data from the Planning, Research and Statistics Department of the Niger state Ministry of Education, Minna (2018) revealed that there are thirty one (31) senior secondary schools in Suleja education zone with twelve thousand four hundred and eight (12,408) students. This population cut across the three local government areas (Suleja, Gurara & Tafa) in Suleja education zone of Niger state, Nigeria. The distribution of the students' population in Suleja education zone by local government is represented in table 1.

**Table 1:** Population distributions of senior secondary school students according to Local Government Areas in Suleja Education zone

| S/N          | Local Government Area | Number. of Schools | Population    |
|--------------|-----------------------|--------------------|---------------|
| 1            | Suleja                | 9                  | 5215          |
| 2            | Gurara                | 14                 | 4051          |
| 3            | Tafa                  | 8                  | 3142          |
| <b>Total</b> |                       | <b>31</b>          | <b>12,408</b> |

**Source:** P.R.S. Department, Niger State Ministry of Education, Minna (2018).

The population of this study therefore comprised of thirty five (35) male and female SS2 students identified with social anxiety symptoms from Government Day Secondary School Lambata Gurara Local Government, Niger state. These students were identified using the adapted social anxiety scale developed by Yahaya and Nyarko-Samson (2016) from University of Ilorin and Ghana respectively. The researcher purposively selected sS2 students for this study. This is because the SS2 students have stayed longer in the school than SS1, while the SS3 students are preparing for their final exam thus were left to concentrate on their studies.

The sample of this study comprised of sixteen (16) SS2 students purposively selected from the thirty five (35) students; that is 8 male and 8 female students identified with social anxiety symptoms from Government Day Secondary School, Lambata, Gurara Local Government Area in Suleja Education Zone. This selection was based on the recommendation of the authors of the adapted instrument of the study. According to Yahaya and Nyarko-Sampson (2016), a respondent that scores between 60 and 100 is considered to have a major challenge regarding social anxiety, thus, the eighteen (18) selected students' falls within this category and therefore, were used for the study.

The Social Anxiety Scale (SAS) was used as instrument for data collection for this study. This instrument was adapted from Yahaya and Nyarko-Sampson (2016) with little modifications. The instrument has sections A and B. Section A has 5 items on respondents' demographic information. Section B has twenty (20) items on social anxiety. These items used five Likert scale response options as: Not True of Me (NTM), Slightly True of Me (STM), Moderately True of Me (MTM), Very True of Me (VTM) Very Much True of Me (VMTM), which the respondents are expected to choose one from the five response options that best described them. The minimum score a respondent can obtain is 20 (that is, 1x20) while the maximum obtainable score is 100 (that is, 5x20). By interpretation therefore, any respondent that obtained a score less than 60 (that is, 0-59) is considered as not having major challenges on social anxiety, while a respondent that has between 60 and 100 is considered to have a major challenge regarding social anxiety. This interpretation is based on the fact that every individual need a moderate level of anxiety to operate effectively and efficiently (APA as cited in Yahaya & Nyarko-Sampson, (2016).

The section A of the original social anxiety scale developed by the authors has 10 items but was modified to 5 items while the section B of the scale which covered social anxiety has 50 items but was modified to 20 items to suit the study.

The validity of the instrument was determined using content validity as a copy of the instrument was given to three (3) experts from the Department of Educational Psychology and Counselling, Faculty of Education, Ahmadu Bello University, Zaria to evaluate the contents of the instrument, and make necessary corrections and modifications to ascertain their appropriateness and content coverage with reference to the research objectives. Thus, the final copy of the instrument (social anxiety scale) was produced in the light of the experts' observations, opinions and corrections that were harmonized.

To determine the reliability of the instruments, a pilot testing was conducted using test re-test method. The instruments was administered twice within an interval of two weeks to the same respondents of Government Day Secondary School, Gawu Babangida and the two sets of scores obtained were correlated using Pearson Product Moment Correlation Coefficient and the  $r$  value of 0.795 was obtained. The result revealed high positive numerical value of correlation which provided strong evidence for use in this study. This is also in line with Akuezuilo (2009) who suggested that a correlation that is close to 1 was high and reliable for use as an instrument for data collection.

The researchers collected an introductory letter from the Department of Educational Psychology and Counselling, Faculty of Education, Ahmadu Bello University, Zaria. The letter was taken to the Niger State Ministry of Education to seek for approval. The approval letter obtained from the ministry was further taken to the principal of the selected senior secondary school for access and consent to collect data from the school.

The principal after introduction gave two teachers who served as research assistants to the researchers. The researchers trained the research assistants on how to help the researchers to administer the instrument. All the instruments were collected back after the completion. The instruments were scored and the targeted sample was determined for the study. The treatment session lasted for six weeks (twice a week) and at the last week of the session, a posttest was administered with the help of the two research assistants.

### **Treatment session/experiment**

The whole treatment session lasted for a period of six weeks. It was based on group counselling and each session lasted between 40–50minutes. The students identified with social anxiety received treatment. The researcher and the school authority agreed on a particular day (Thursdays and Fridays) for the exercise. The post-test was taken at the last week of the treatment period. The following are the activities carried out during the sessions:

#### **Session One: Introduction**

The following activities took place:

- the researchers was introduced to the students
- the researchers explained to the student the mission of the research
- the researchers established relationship with the students.

**Session two:** Understanding social anxiety and cognitive restructuring

The following activities were carried out:

- the researchers helped the students to properly understand what social anxiety is
- the researchers introduced to the student what counselling technique can do to change behaviour
- the researchers introduced to the student, the concept of cognitive restructuring technique.

**Session three:** Identifying negative thoughts

The following activities were carried out:

- the researchers helped to identify the negative thoughts of the students (cognitive distortions)
- the researchers helped the students to understand how cognitive distortions trigger social anxiety
- the researchers explained the process of attaching behaviour to automatic thoughts.

**Session four:** Identifying negative thoughts

The following activities were carried out:

- evidences against the negative thoughts mentioned in the previous session were identified
- the irrational behaviours exhibited by the students, which are mainly caused by the negative thoughts were identified

**Session five:** Challenging distorted thoughts

The following activities were carried out in this session:

- challenged the distorted thoughts identified in the previous sessions
- guided the students to positively think of better alternatives to challenge their distorted thoughts (cognitive distortions).

**Session six:** Conclusion and posttest administration

The following activities were carried out in this session:

- the researchers rounded off the counselling relationship
- the researchers ascertained the effects of the counselling or treatment process carried out in the study
- the researchers discussed other relevant issues not discussed in the previous sessions
- the researchers administered the posttest on the student.

Descriptive statistics of mean and standard deviation were used to present the demographic data of the respondents while inferential statistics of paired sampled t-test was used to test the null hypotheses at 0.05 levels of significance

### **Presentation of results**

**Ho1:** There is no significant difference between pre-test and post-test Social Anxiety among male senior secondary school students in Suleja Education Zone of Niger state, Nigeria.

**Table 2:** Paired sample t-test comparing pre-test and post-test of Social Anxiety among male students based on Cognitive Restructuring technique

| <b>Test</b> | <b>N</b> | <b>Mean</b> | <b>SD</b> | <b>t</b> | <b>df</b> | <b>P</b> |
|-------------|----------|-------------|-----------|----------|-----------|----------|
| Pre-test    | 8        | 26.11       | 5.811     | 3.238    | 6         | .005     |
| Post-test   |          | 20.11       | 6.814     |          |           |          |

Table 2 shows that there is significant difference between pre-test and post-test of Social Anxiety among male senior secondary school students in Suleja Education Zone after being exposed to Cognitive Restructuring technique with the mean score of 26.11 for pre-test and 20.11 for post-test,  $t=3.238$  and  $p=.005$ . This means that the treatment (Cognitive Restructuring) has effect in reducing Social Anxiety among male students. Therefore, the null hypothesis that states that there is no significant difference between pre-test and post-test Social Anxiety among male senior secondary school students in Suleja Education Zone is hereby rejected.

**Ho2:** There is no significant difference between pre-test and post-test of Social Anxiety among female senior secondary school students in Suleja Education Zone of Niger state, Nigeria.

**Table 3:** Paired sample t-test comparing pre-test and post-test of Social Anxiety among female students based on Cognitive Restructuring Technique

| <b>Test</b> | <b>N</b> | <b>Mean</b> | <b>SD</b> | <b>t</b> | <b>df</b> | <b>P</b> |
|-------------|----------|-------------|-----------|----------|-----------|----------|
| Pre-test    | 8        | 30.53       | 5.767     | 7.087    | 6         | .000     |
| Post-test   |          | 20.37       | 6.414     |          |           |          |

Table 3 reveals that there is significant difference between pre-test and post-test of Social Anxiety among female senior secondary school students in Suleja Education Zone after being exposed to Cognitive Restructuring Technique with the mean score of 30.53 for pre-test and 20.37 for post-test,  $t=7.087$  and  $p=.000$ . This means that the treatment (Cognitive Restructuring) has effect in reducing Social Anxiety among female students. Therefore, the null hypothesis that states that there is no significant difference between

pre-test and post-test of Social Anxiety among female senior secondary school students in Suleja Education Zone is hereby rejected.

### **Summary of findings**

i. There is significant effect of Cognitive Restructuring Technique on Social Anxiety among male senior secondary school students in Suleja education Zone of Niger state, Nigeria.

ii. There is significant effect of Cognitive Restructuring Technique on Social Anxiety among female senior secondary school students in Suleja education Zone of Niger state, Nigeria.

### **Discussion of the findings**

The purpose of this study was to determine the effect of cognitive restructuring technique on social anxiety among male and female senior secondary school students in Suleja education zone of Niger state, Nigeria. The findings of this study revealed that there is significant effect of cognitive restructuring technique on social anxiety among male and female senior secondary school students in Suleja education zone of Niger state, Nigeria. The findings of this study agree with the findings of Muhammad (2016) who conducted a study on the effect of cognitive behavioural treatment programme on anxiety level and self-esteem among secondary school students. A Quasi experimental pre-post non-equivalent group design was used for her study. The findings of the study revealed that there was a statistically significant difference between treatment and control groups in the reduction of anxiety level among secondary school students. This study also concurred with the findings of Ngwoke and Numode (2013), who conducted a study on the effect of cognitive restructuring intervention programme on test anxiety of low-achieving students. Results showed that cognitive restructuring significantly reduced test anxiety of low-achieving students.

This finding also agrees with the findings of Pour, (2014) who conducted a study on the effect of Cognitive Restructuring Therapy (CRT) on anxiety in infertile women. Findings from the Analysis of Covariance showed that CRT significantly has improved the anxiety in experimental group in comparison with control group.

This is also in line with the findings of Ghamari, Rafeie and Kiani (2015) who conducted a study on the efficacy of cognitive restructuring therapy and the appropriate methods of study in reducing test anxiety symptoms among third grade high school students in Khalkhal, Iran. The results of their study revealed that the prevalence of test anxiety among students was 36.6%. Results of the standard Hotelling test showed that the impact of cognitive restructuring method and study methods were significant in reducing the symptoms of test anxiety of students.

In general however, the findings of this study is contrary to the findings of Saied, Sulaiman, Hamzah, Garmjani, Kamaliyeh and Roslan (as cited in Usman, 2015) who examined the effect of rational self analysis and cognitive restructuring counselling

techniques on retirement anxiety among academic staff of tertiary institutions in Katsina State. Two-way repeated measure ANOVA indicated that rationale self analysis and cognitive restructuring had no significant effect on retirement anxiety symptoms across pre-test, post-test and follow-up.

### **Conclusion**

From the findings of this study, it can be concluded that cognitive restructuring technique has significant effect on social anxiety among male and female students; and if positively utilized, it can be used as a behaviour modification technique to minimize social anxiety among male and female secondary school students.

### **Recommendations**

Based on the findings of this study, the following recommendations were made that:

1. Every secondary school (public or private) should have a counselling unit with professional counsellors and school psychologists that will help in handling students with social anxiety.
2. School counsellors and psychologists should be encouraged to use cognitive restructuring technique to address social anxiety among male and female secondary school students.
3. Secondary school teachers should be encouraged to replace corporal punishment with a modernized behaviour modification technique such as cognitive restructuring technique to address social anxiety among male and female secondary school students by referring the affected students to the school counsellors and psychologists for help.

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