EFFECT OF COGNITIVE RESTRUCTURING AND SOCIAL SKILLS TRAINING ON SOCIAL PHOBIA AMONG SECONDARY SCHOOL STUDENTS IN JEGA METROPOLIS, NIGERIA

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Abstract

This study investigated the effect of Cognitive Restructuring (CR) and Social Skills Training (SST) on social phobia among secondary school students in Jega Metropolis. The study was guided by three objectives and tested three null hypotheses. A quasi-experimental design with pre-test and post-test on two experimental groups was utilized. The population consisted of 1,742 students exhibiting social phobia symptoms in Jega metropolis. A sample of 40 students was selected using purposive sampling. The Social Phobia Inventory (SPIN) with a reliability coefficient of 0.81 was used for data collection, and t-test statistics analyzed the data. Findings indicated that students exposed to CR and SST experienced a significant reduction in excessive social phobia (p=0.001, and p=0.000). Furthermore, a significant differential effect was observed between CR and SST (p=0.009), with SST being more effective. The study concluded that both CR and SST are effective in reducing social phobia, with SST being more potent. Psychologists and counselors were recommended to utilize these techniques to improve students' social interactions and learning competency.

Keywords: Cognitive Restructuring, Social Skills Training, Social phobia, Students

and Metropolis

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Introduction

Social Phobia, also known as social anxiety disorder, is a prevalent and chronic mental health disorder globally, affecting occupational, educational, and social aspects of an individual's life (Beidel, https://www.google.com/search?q=2014). According to MacLeod (https://www.google.com/search?q=2014), it is the third most common mental health disorder after depression and substance abuse. It is characterized by intense distress in public situations, a strong fear of being judged and embarrassed, and can significantly interfere with daily activities like work or school (Goldfried, Linehan, & Smith, 2018). Individuals with social phobia fear common actions in front of others, such as signing a check or eating. Unlike normal nervousness, this worry persists for weeks and leads to avoidance of social situations, hindering everyday tasks and enjoyment of family and friends. The Diagnostic and Statistical Manual of Mental Disorders (DSM-5) formally diagnoses it as Social Anxiety Disorder (SAD) (National Institute of Mental Health, https://www.google.com/search?q=2014). When anxiety is

disruptive, it leads to cognitive, behavioral, physiological, and emotional problems, and if severe, it may be diagnosed as an anxiety disorder (Alexi, et el. 2013). A diagnosis of social phobia signifies a condition that significantly disrupts daily functioning and requires intervention. This diagnosis applies to individuals whose social interactions consistently provoke distress, and whose fear or anxiety is disproportionate in frequency and duration to the situations experienced. Criteria also include avoiding social interactions or enduring them reluctantly, and a specific concern about being noticed, observed, judged, or embarrassed in social settings. According to Wagner (2015), in such situations, individuals fear displaying anxiety and experiencing social rejection, often accompanied by autonomic arousal like sweating, trembling, tachycardia, or nausea. These symptoms can arise in reaction to strangers or acquaintances. It is important to distinguish social phobia from normal shyness and introversion. Occasional anxiety is normal, but social phobia involves persistent and worsening worry and fear that interferes with daily activities, job performance, school work, and relationships (Emslie, 2018). It represents a disabling mental health problem, often characterized by fear of humiliation or mockery in social situations due to improper attitudes or anxiety symptoms like tremors and sweating (Bolsoni-Silva, & Loureiro, https://www.google.com/search?q=2014). Social interaction becomes more threatening with perceived lack of motor control (e.g., while drinking or writing). Socially phobic students often avoid others, lack peer interaction, and can experience loneliness and isolation, trapping them in a cycle of anxiety and negative expectations. Interventions addressing negative thinking and poor social skills can be beneficial.

Social phobia is common among young people, with approximately half of those treated reporting during childhood adolescence onset or (Beidel, https://www.google.com/search?q=2014). Reports suggest it affects 2% to 4% of the population and is the most common mental disorder in the United States. Estimates for anxiety disorders among children range from 5% to 18%. According to Lawan (2016), social phobia is a problem for young people, often manifesting in school. While information is limited in sub-Saharan Africa, a study found a 9.4% prevalence among Nigerian university students. Alexi, et el (2013) found that about half of students diagnosed with social phobia experience significant difficulty functioning at school, leading to lower academic performance. More severe cases can result in tardiness, absenteeism, perfectionism, incomplete work, test failure, and high dropout rates, sometimes masked by substance abuse or truancy. Students with social phobia tend to avoid fear-evoking situations. Research shows adolescents with high social phobia are more motivated to generate avoidance goals and are less specific in forming approach plans (Alexi, et el, 2013). They are more inclined to avoid unpleasant situations or anticipate failure (e.g., an oral presentation) rather than confronting them (Bernstein et al, https://www.google.com/search?q=2014). Despite its prevalence, students with social phobia can benefit from support and treatment to approach rather than avoid threatening situations. Thus, identifying effective interventions for youth with social phobia in schools is critical to prevent more serious problems.

Lawan (2016) states that psychotherapy is considered the most effective and lasting treatment. Various therapeutic approaches, including cognitive behavioral therapy, social skills therapy, life skills therapy, and assertiveness training, have shown effectiveness in treating social phobia (Emslie, 2018). This study specifically investigated the effect of Cognitive Restructuring (CR) and Social Skills Training (SST) on social phobia. Cognitive Restructuring involves identifying and modifying

distorted thoughts, conditional beliefs, and core beliefs to gain insight into a patient's cognitive processes (Alden, https://www.google.com/search?q=2014). It focuses on practical discussions and homework assignments. A study by Shina (2015) suggests 12 to 16 group or individual sessions can significantly reduce symptoms for circumscribed phobias, while generalized social phobia may require longer treatment depending on comorbidities (Erik, https://www.google.com/search?q=2014). CR has been proven effective in treating school refusal, school phobia, avoidant behavior, and test anxiety (Shina, 2015). Social Skills Training has been shown to be an effective therapy for social phobia and other psychosocial problems like Avoidant Personality Disorder and social anxiety (Alexi, et el, 2013). How this therapy can help reduce social phobia is

yet unknown, particularly in Jega metropolis, Kebbi state, Nigeria. Hence, the need for

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Statement of the Problem

this study.

Secondary school students, largely adolescents, spend a significant portion of their daily lives at school, requiring considerable social interaction. For socially phobic students, the school environment presents numerous stressful situations, such as oral presentations, answering questions in class, making friends, and participating in group activities. This can lead to social withdrawal, class avoidance, or even school refusal, resulting in poor academic performance and potential dropout. Poor academic achievement is a major issue for these students due to their avoidance of group work or public speaking. A 2023/2024 academic performance report indicated that about 19.5% of junior secondary students exhibit social phobia symptoms in Kebbi State. If left unaddressed, social phobia is a risk factor for delinquency, truancy, school dropout, drug addiction, unwanted pregnancy, and psychological problems like stress and depression. This study therefore investigated the effect of Cognitive Restructuring and Social Skills Training on social phobia among secondary school students in Jega Metropolis.

Objectives of the Study

The objectives of the study are to:

- i. Examine the effect of Cognitive Restructuring on Social Phobia among secondary school students in Jega Metropolis.
- ii. Examine the effect of Social Skills Training on Social Phobia among secondary school students in Jega Metropolis.
- iii. Find out the differential effect of Cognitive Restructuring and Social Skills Training on Social Phobia among secondary school students in Jega Metropolis.

Research Questions

The study answers the following questions:

- i. What is the effect of Cognitive Restructuring on Social Phobia among secondary school students in Jega Metropolis?
- ii. What is the effect of Social Skills Training on Social Phobia among secondary school students in Jega Metropolis?

iii. What is the differential effect of Cognitive Restructuring and Social Skills Training on Social Phobia among secondary school students in Jega Metropolis?

Hypotheses

The following hypotheses were formulated to guide the study:

- H01. There is no significant difference between pre-test and post-test scores of students exposed to Cognitive Restructuring on Social Phobia among secondary school students in Jega Metropolis.
- H02. There is no significant difference between pre-test and post-test scores of students exposed to Social Skills Training on Social Phobia among secondary school students in Jega Metropolis.
- H03: There is no significant differential effect of Cognitive Restructuring and Social Skills Training on Social Phobia among secondary school students in Jega Metropolis.

Theoretical Framework

Theoretical frameworks provide a foundation for understanding the complex dynamics in relation to the effectiveness of CR and SST. This section explores four key theories that underpin the study: Beck's Cognitive Therapy, Bandura's Social Learning Theory, Skinner's Operant Conditioning Theory, and Pavlov's Classical Conditioning Theory. Each theory is discussed in terms of its proponent, year, assumptions, and relevance to the present study. Beck's Cognitive Therapy (1984) (Cognitive Theory) posits that abnormal behavior results from distortions in thinking patterns. Cognitive restructuring aims to teach clients to identify and challenge their distorted thoughts, replacing them with more rational ones to reduce abnormal behavior. Automatic thoughts, which are spontaneous and rapid interpretations of situations, are central to this theory, and clients learn to monitor and identify them.

Bandura's Social Learning Theory (1965) explains that much human behavior is learned observationally through role-playing, modeling, and imitation, which are core components of Social Skills Training. Observing others allows individuals to form ideas of how new behaviors are performed, guiding their future actions.

Skinner's Operant Conditioning Theory (1953) focuses on observable behavior and how it is influenced by environmental learning. It suggests that fear or phobia can be learned and modified through the application of operant conditioning principles, where behaviors are repeated if followed by desirable outcomes.

Pavlov's Classical Conditioning Theory (1936) describes how responses are learned through the pairing of a conditioned stimulus (CS) with an unconditioned stimulus (UCS). The principle of extinction, where the conditioned response (e.g., social phobia) is unlearned by exposing the client to anxiety-provoking stimuli without the associated stress, is relevant to treating phobias.

Methodology

Research Design

The study employed a quasi-experimental design involving a pre-test/post-test with two experimental groups. In this design, participants are assigned to two experimental groups to receive different treatments. Quasi-experimental designs allow researchers to draw reasonable conclusions even without full control over subjects, as explained by Cohen, Manion, and Morrison (2007). In this study, one group of students exhibiting social phobia symptoms (fear, physiological manifestations, and avoidance) was exposed to Cognitive Restructuring (Group A), while another similar group was exposed to Social Skills Training (Group B). Pre-tests and post-tests were conducted to measure changes in their social phobia in both groups.

Population of the Study

The population of the study consisted of public junior secondary school students identified with social phobia in Jega Metropolis. A total of 1,742 Junior Secondary School students were identified from 20 secondary schools. Junior Secondary School I (JSS1) students were included because they are newly admitted and likely to face challenges in a new environment with new teachers and peers. Additionally, literature suggests that social phobia often emerges during school transitions and adolescence, making intervention at this stage potentially more effective.

Sample and Sampling Techniques

Purposive sampling was used to select the sample for this study. The sample comprised 40 Junior Secondary Class One (JSS1) students who exhibited mild and moderate symptoms of social phobia, as measured by the Social Phobia Inventory (SPIN). From this sample, two classes, each consisting of 20 students, were drawn from two Junior Secondary Schools in Jega metropolis. The researcher randomly assigned these two secondary schools to the Cognitive Restructuring (CR) and Social Skills Training (SST) treatment groups. Students with severe and very severe social phobia were beyond the scope of this study and were referred to school authorities for clinical referral.

Table 1: Distribution of the Junior Secondary Schools Sample size and Percentage

Schools Name	Sample size	Percentage %	
1. Gov't Day Sec Sch. (Boys), Jega	20	50	
2. Ni'ima Junior Sec. Sch. Jega	20	50	
Total	40	100	

Source: Field work (2025)

Instrument for Data Collection

The Social Phobia Inventory (SPIN) was adapted and used as the instrument for data collection. Developed by Connor in 2000, it is a 17-item self-rating scale for social phobia. The scale assesses various symptom domains of social phobia. It uses a five-point Likert scale ranging from 1 (Not at all) to 5 (Extremely). The total score, ranging

from 17 to 68, indicates the severity of social phobia. Specific items measure fear of social interactions (Items 1, 3, 5, 6, 14, 15), avoidance of social interactions (Items 4, 8, 9, 11, 12, 16), and physiological manifestations of social interactions (Items 2, 7, 10, 13, 17). The severity categories are: Less than 20 (None), 21-30 (Mild), 31-40 (Moderate), 41-50 (Severe), and 51 and above (Very severe). This study focused on students in the mild and moderate categories. The instrument's adoption in Nigeria was deemed appropriate due to its use in other countries for assessing social phobia symptoms. The SPIN was used to identify subjects meeting the research criteria and was administered with the help of classroom teachers.

Validation of Instrument

The SPIN was validated by lecturers in the Department of Education of Kebbi State University of Science and Technology, Aliero. Their input contributed to the final form of the instrument.

Reliability of the Instrument

To determine the stability of the Social Phobia Inventory (SPIN), a pilot test was conducted on JSS1 students from Government Secondary School Okey Jega Local Government Area, Kebbi state, Nigeria. A test-retest reliability analysis was performed by administering the SPIN a second time after two weeks. The scores from both administrations were correlated using the Pearson Correlation Formula, yielding a coefficient of 0.811. This high reliability was important as the same instrument was to be used for both pre-test and post-test measurements.

Method of Data Collection

The researcher proceeded to the principals of selected junior secondary schools. After rapport and approval from the principals, the attendance registers of JSS1 students were checked, specifically for the last and current term. Students identified as truants or those avoiding certain lessons or school activities were then administered the SPIN for identification purposes. Schools with the highest incidence of social phobia were selected for the CR and SST treatment groups. The SPIN was administered to the selected students, with 20 students participating in the pre-test for each of the two treatment groups. The researcher established rapport with the students, explained the purpose of the exercise, and assured them that there were no right or wrong answers, encouraging honest responses. Each session took approximately 30 minutes, and the same procedure was followed for the post-test.

Treatment Procedure

The core idea of cognitive restructuring (CR) is that individuals can learn new behaviors in response to stimuli, and by altering thought processes that mediate between stimuli and behavior, phobias can be influenced. Both CR and SST programmes were implemented in the treatment schools.

Pre-Treatment: Before the training, the researcher familiarized himself with the subjects to understand their competencies, interests, and academic challenges, which helped in motivating them to acquire new skills. Immediately after assigning classes to

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treatment groups, the SPIN was administered to collect pre-test data. To avoid disrupting the school schedule, CR and SST instructions were given during free periods. The experiment was designed to last for six weeks.

Treatment Programs: CR and SST programs were used for training in the treatment schools.

Treatment Phases: The study involved pre-treatment, treatment, and post-treatment phases.

Method of Data Analysis

The collected data from the research instrument was collated, organized, and analyzed. Paired-sample t-tests were used to test Hypothesis 1 and 2, while an Independent-sample t-test was used to test Hypothesis 3. All hypotheses were tested at a 0.05 level of significance.

Results

Hypotheses Testing

Hypothesis One: The null hypothesis stated that there is no significant effect of Cognitive Restructuring on social phobia among secondary school students in Jega Metropolis.

Table 2: Paired sample t-test on the effect of Cognitive Restructuring on social phobia among secondary school students.

Variable	Tests	N	Mean	SD	df	t-cal	P
	Pre-test	20	11.700	1.417			
Social phob	ia				19	4.530	0.001
	Post-test	20	9.450	1.503			

P < 0.05, t computed > 1.96 at df 19

Results of the Paired sample t-test statistics in Table 1 showed that Cognitive Restructuring (CR) has a significant effect on social phobia (t=4.530, p=0.001). The mean score of the participants' social phobia before exposure to the treatment was 11.700, and it was reduced to 9.450 after exposure to the treatment of Cognitive Restructuring, implying a mean reduced difference of 2.250 in favor of the post-test scores. This shows that Cognitive Restructuring has a positive effect on their social phobia. Therefore, the null hypothesis which states that there is no significant effect of Cognitive Restructuring on social phobia among secondary school students is rejected. Hypothesis Two: The null hypothesis stated that there is no significant effect of Social Skills Training on social phobia among secondary school students in Jega Metropolis.

Table 2: Paired sample t test on the effect of Social Skills Training on social

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Variable	Tests	N	Mean	SD	Df	t cal	P
	Pre-test	20	12.5500	1.637			
Social phobia					19	5.771	0.000
	Post-test	20	8.8500	1.814			

P < 0.05, t computed > 1.96 at df 19

Results of the Paired sample t-test statistics in Table 2 showed that Social Skills Training has a significant effect on social phobia (t=5.771, p=0.000). The mean score of the participants on social phobia before exposure to Social Skills Training was 12.550, and it was reduced to 8.800 after exposure to the treatment of Social Skills Training, implying a mean reduced difference of 3.750 in favor of the post-test scores. This shows that Social Skills Training has a positive effect on social phobia. Therefore, the null hypothesis which states that there is no significant effect of Social Skills Training on social phobia among secondary school students is rejected.

Hypothesis Three: The null hypothesis stated that there is no significant differential effect of Cognitive Restructuring and Social Skills Training on Social Phobia among secondary school students in Jega Metropolis.

Table 3: Independent t-test on differential effect of Cognitive Restructuring and Social Skills Training on Social Phobia.

Variable	Study	N	Mean	SD	Df	t-cal	P
	Groups						
	CR	20	28.300	3.540			
Social Phob	ia				38	2.733	0.009
Scores							
	SST	20	24.940	4.290			

P < 0.05, t computed > 1.96 at df 38

Results of the Independent sample t-test statistics in Table 3 were obtained by comparing the post-test result of the Cognitive Restructuring and Social Skills Training groups, and it showed that a significant differential effect exists between Cognitive Restructuring and Social Skills Training on Social Phobia (t=2.733, p=0.009). Their mean scores on Social Phobia for Cognitive Restructuring (CR) was 28.300 and Social Skills Training was 24.940, implying a mean difference of 3.400 in favor of Social Skills Training. This shows that Social Skills Training has more effect than Cognitive Restructuring on social phobia. Therefore, the null hypothesis which states that there is no significant differential effect of Cognitive Restructuring and Social Skills Training on Social Phobia among secondary school students in Jega Metropolis, is rejected.

Discussion of Findings

The study found that both Cognitive Restructuring (CR) and Social Skills Training (SST) are significantly effective in treating Social Phobia (SP). The analysis revealed that CR significantly reduced social phobia among secondary school students in Jega Metropolis. This finding aligns with Shina (2015), who found that CR significantly reduced school phobia. It also supports Lawal (2016) and Umaru et al., who reported

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significant effects of CR in reducing Avoidant Personality Disorder (APD) and tobacco use cessation, respectively. Furthermore, this finding is consistent with Goldfried, Linehan, and Smith (2018) on the reduction of test anxiety through cognitive restructuring. This aligns with Aaron Beck's Cognitive Therapy, which proposes that abnormal behavior stems from distorted thinking patterns that can be modified. CR is proven effective in reducing social phobia and overcoming the disorder.

Another key finding is that Social Skills Training significantly reduces social phobia among secondary school students in Jega Metropolis. This is consistent with Beidel (https://www.google.com/search?q=2014) who showed that SST led to a significant reduction in social phobia. Lawan (2016) also found SST effective in reducing Avoidant Personality Disorder. This finding relates to Bandura's social learning theory, which emphasizes learning through observation, role-playing, modeling, and imitation—core components of SST. It also aligns with Skinner's Operant Conditioning Theory, which suggests that behavior, including phobias, can be learned and modified through reinforcement. Additionally, Pavlov's Classical Conditioning Theory supports the idea that conditioned responses (like social phobia) can be unlearned through extinction by exposing clients to anxiety-provoking stimuli without the associated stress. The findings also align with Beck's Cognitive Theory, where clients learn to identify and address automatic thoughts and can benefit from role-playing to build social skills and overcome problems. Therapists are advised to provide thorough client education before treatment to prevent spontaneous recovery of symptoms.

A significant differential effect was found between Cognitive Restructuring and Social Skills Training on Social Phobia, with SST being more effective. This could be attributed to SST's emphasis on training in social activities through observation, imitation, and frequent peer interaction. However, this finding contradicts Lawal (2016) who found no significant differential effect between CR and SST on Avoidant Personality Disorder, possibly because his study focused on only one dimension of social phobia.

Conclusion

Based on the findings, it was concluded that Cognitive Restructuring is effective in reducing symptoms of Social Phobia, as demonstrated by the analysis of pre-test and post-test results of students exposed to this intervention. Similarly, Social Skills Training was found to be effective in reducing Social Phobia symptoms, based on the analysis of pre-test and post-test results of students exposed to SST. In comparison, there is a differential effect between the two techniques, with Social Skills Training having a greater effect than Cognitive Restructuring, though both are effective in treating Social Phobia among secondary school students.

Recommendations

Based on the study's findings, the following recommendations were made:

Educational psychologists and school counselors working in secondary schools, particularly in Kebbi State and similar educational settings, should be trained and encouraged to use Cognitive Restructuring (CR) techniques in handling social phobia among students.

School administrators, in collaboration with the State Ministry of Education and professional counseling associations such as CASSON (Counselling Association of Nigeria), should engage educational psychologists and counselors to apply Social Skills Training (SST) in addressing social phobia.

Educational psychologists and counselors should also organize sensitization programs for educators, parapsychologists, social workers, and school heads on the use of CR and SST, particularly in managing mild to moderate cases of social phobia.

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