EFFECTS OF MODELLING TECHNIQUE ON SHYNESS AMONG JUNIOR SECONDARY SCHOOL STUDENTS IN BENIN METROPOLIS OF EDO STATE

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ABSTRACT: *Shyness which is a behavioural problem has had so much negative effects on the overall well-being of students both academically and socially. In other to reduce the problem of shyness in students, the researcher in her study investigated the effects of modelling technique on shyness among junior secondary school students in Benin Metropolis of Edo State. Two research questions and two null hypotheses tested at 0.05 level of significance guided the study. A Quasi-experimental design pre-test, post-test non randomized control group was adopted for the study. Purposive sampling technique was used in selecting the sample of 61 shy students out of a population of 327 identified shy students. All the two groups were pre-tested and post-tested using Shyness Personality Scale (SPS) designed by Akinade (2012) and it is a standardized instrument. Data collected for the study were analysed using mean and ANCOVA. Results obtained from the study indicated that modelling technique was effective in reducing shyness among junior secondary school students. Also modelling technique was effective in reducing female junior secondary school students' shyness. The effect of modelling technique on shyness among junior secondary school students was significant. The researcher recommended among others that modelling technique be adopted as effective treatment strategy in helping students with shyness so as to enhance their performance both academically and socially.*

KEYWORD: Shyness, Modelling Technique, Junior Secondary School Students, Nigeria

INTRODUCTION

Background to the Study

Shyness, a deficit behaviour is mainly a social phenomenon which is always expressed in relation to other persons. Numerous terms such as dating anxiety, speech anxiety, social anxiety, social phobia, shame, social inhibition, reticence, communication apprehension, introversion, stage fright, social withdrawal, anxiety solitary, and audience anxiety have been used to denote shyness. However, the terms are not quite synonymous with shyness, though there exist some relationships between them (Leary & Kowalski, 2008, Vam-Dam & Kraaimaat, 2009).

In a layman's view, shyness describes the discomfort experienced in social developments and is revealed in the emotions, self-evaluations and behavioural patterns of the shy individual. According to Izard (2012) shyness is virtually an unavoidable emotion, given that it is directly related to many aspects of human nature. Like many other emotional deficits, shyness is encountered in social relationships and experienced mostly in connection to others.

Undoubtedly, shyness is a familiar concept and a common experience for many people (mostly children and adolescents) in the society. It is so inherent in human life that many people reported experiencing a period of shyness at certain times in their lives, although the levels of experience vary from one individual to another (Carducci, 2009; Henderson & Zimbardo, 2008). Shyness, when it becomes persistent becomes a problem.

Shyness has been defined as a heightened state of individuation characterized by excessive egocentric preoccupation and over concern with social evaluation with the consequence that the shy person inhibits, withdraws, avoids and escapes. It is the tendency to feel awkward, worried or tensed during social encounters, especially with unfamiliar people (American Psychological Association, APA, 2012). Evans (2010) described a shy individual as being fearful, anxious, cautious and reluctant to take part in interactions with others in situations that involve uncertainty, novelty and actual or perceived judgment by others. Not only are these psychological symptoms present, shyness may also produce physical symptoms such as abnormal sweating and stomach complication (APA, 2012).

In the same vein, Coplan and Arbeau (2008) observed that shy people always feel weary in new social situations, perceive such instances as threatening, and thus experience high levels of anxiety. Moreover, Rubin, Coplan and Bowker (2009) saw shyness as a temperamental trait characterized by the persistent experience of wariness and anxiety in novel social situations and those perceived to be socially evaluative in nature. Furthermore, the social encounters of shy individuals are characterized by an approach-avoidance conflict; where shy students may long for social interactions; this approach motivation is inhibited by social fear and anxiety. For the purpose of the present study, shyness may be defined as a form of excessive self-focus, a preoccupation with one's thoughts, feelings and emotions. Shyness is a deficient behaviour in children, adolescents and adult that is usually expressed in social situation either in overt or covert form. A shy person inhibits, withdraws, avoids and escapes from social interactions.

It is a behaviour that affects how a person feels and behaves around others. It also means feeling uncomfortable, self-conscious, nervous, bashful, timid or insecure. People who feel shy sometimes notice physical sensations like blushing or feeling speechless, shaky or breathless. Shyness is the opposite of being at ease with oneself around others.

For more clarification on the concept of shyness, some scholars like Christopher (2008) stated that the concept of shyness may be defined experientially as discomfort and/or inhibition in interpersonal situations that interferes with pursuing one's interpersonal or professional goals. It is a form of excessive self-focus, a preoccupation with one's thoughts, feelings and physical reactions. Miller (2007) also explained that shyness is a psychological term that describes the feeling of apprehension, lack of comfort or awkwardness experienced when a person is in proximity to approaching, or being approached by other people especially in new situations or with unfamiliar people.

For some people, the problem of shyness is having trouble thinking of what to say in social situations, while for others it involves crippling physical manifestations of uneasiness. For most people shyness involves a combination of both symptoms to a greater or lesser degree. In any case, the effect of shyness can be devastating. Students with this behaviour problem (shyness) tend to be poor in their social interactions, feel insecure to talk freely either in the classroom situation or in the midst of their peer group. These attitudes prevent them from normal participation in and contribution to classroom activities which adversely affect their academic

performance. When people feel shy, they might hesitate to say or do something because they are feeling unsure of themselves and are not ready to be noticed. Evidence has shown that there are students with shyness in classrooms. Yet, despite the several efforts of parents, teachers and siblings to assist such students/children in reducing their shyness by several ways of advising the problem still persists. This implies that the method used by these people was not effective. It has caused the students serious negative effects such as academic backwardness, poor performance and poor social interaction with peers, teachers, parents and siblings.

Teachers find it difficult to engage shy students in classroom activities as they are not willing to communicate with others. They do not answer the questions even when they have the information. During class presentation, shy students face difficulty in expressing views and sharing information, even when they know the correct thing to say. They prefer to stay alone, inexpressive, unwilling to talk and inactive to participate in physical activities such as sports. Also, many shy students are so quiet that they do not receive the help they need from teachers at school, which results in poor school performance. Shy students are usually unable to form healthy peer and teacher's relationship. According to Volbrecht and Goldsmith (2010), family is a strong correlate of shyness, if parents are highly anxious, especially the mother, children are more likely not only to suffer from high level of anxiety, but are also liable to suffer from internalizing behaviour problems, such as shyness. Children may exhibit the poor coping skills and aversive behaviours modelled by their parents.

Another family component of shyness is the home environment. Children from chaotic homes are more likely to be shy. They will experience rejection within their family structure and they may experience unrealistic rejection in other aspects of their lives as well (Volbrecht & Goldsmith, 2010). More so, shyness was shown to be elevated in children whose mothers have high levels of neuroticism and over-protectiveness (Coplan & Arbeau, 2008). There have also been links between mental health problems, including shyness and low socio economic status.

The enumerable problems caused by shyness as identified by different authors indicate that shyness is an endemic disease that has greatly plagued and incapacitated many of the students for a long time. If shyness is not properly addressed and on time too, it may last through adolescence, persisting into adulthood, thus leading to severe emotional disturbances in later life. This therefore calls for proper and immediate response from all facets of helping professions. Luckily, several research studies on shyness have been carried out and numerous findings reported (Urs & Jayaraju, 2008). It is as a result of these findings that the researcher has decided to use modelling technique to proffer solution to the problem of shyness.

Modelling technique is a behavioural intervention in which an observer views a model engaged in an adaptive behaviour. The aim of the intervention is for the participants to learn the adaptive behaviour and to reproduce it more frequently and appropriately. Modelling is one of such interventions which has proven to be an effective tool at reducing problem behaviour and may be used to remove unwanted shyness and create only adaptive behaviour. It is such an approach that involves the counsellor arranging a model for the client to observe and imitate, such as the ability to talk and associate with friends and other people without being shy. The models can be in the form of tape recordings, programmed instruction, video tapes, films and persons which can induce imitative behaviour. Such models must be prestigious, competent, attractive, likable or admirable and friendly. The effect of modelling has led to its use in behavioural treatment of individuals with behaviour disorders that frequently lack important behavioural skills of social interaction and confidence.

Alyce (2012) opined that modelling involves practicing appropriate behaviour responses within social situations, it is the acting out of behaviour, to learn it and refine it as a skill. It involves students imitating their social skills in the therapy session and eventually moving to real life situations. Other variations of modelling include members taking turns to act out one or more roles and providing feedback and support for the other actors (Gilchrist, 2013). Carthy (2013) used modelling and peer mentoring to improve social skills for middle school students with autism spectrum disorder in Australia. Cathy (2013) also used video self-modelling to improve reading fluency and comprehension on elementary school pupils in New Zealand. Geral's (2013) use of video self-modelling was very effective in modifying inappropriate behaviour in elementary school students in Wisconsin.

The modification of thought process is the goal of this treatment technique and as such the researcher believes that this technique if applied will serve as a veritable tool in reducing shyness among our students. Personal observation shows that shyness as a pervading problem among students cuts across gender.

Gender refers to the social attributes and opportunities associated with being male and female (Bornstein & Kake, 2008). Gender according to Butler (2006) refers to the roles and responsibilities of men and women that are created in our families, our societies and our cultures. The concept of gender includes the expectations held about the characteristics, aptitudes and likely behaviours of both women and men. The author further opined that gender roles and expectations are learned. They can change over time and they vary within and between cultures. Systems of social differentiation such as political status, class, ethnicity, physical and mental disability, age and more, modify gender roles.

In Nigeria, most often, females and males are not expected to behave in the same ways or play the same roles. Anuka, George and Ukpona (2012) observed that Nigeria cultural system assigns traditional sex roles that are mutually exclusive to males and females. They stated that some activities are branded abnormal for females but normal for males and vice versa. Gender could be seen as the social forming of the biological sex, it is built on biological differences and transfuses those biological differences in the areas where it is completely baseless. Gender is related to how people not acceptable are perceived and expected to think and act as women and men because of the way society is organized, not because of biological differences (Diprete & Jennings, 2013).

Deyoung, Quilty and Peterson (2008) revealed that females on the average are more nurturing, tenderly-minded, and altruistic more often and to a greater extent than males. The way a male will behave will surely be different from how a female will handle situations. A female is soft and tender but a male is strong and vigorous. This tends to influence their reaction and the way the male handles life which will cause behavioural differences because there exist anatomical and physiological differences. A female's interest, ability, aspiration, belief, attitudes and other personality traits will be different from that of the male counterpart.

Available literature has shown that there exists a significant link between shyness and gender (Mills, Arbeau, Lall & Jaeger, 2011). In support of the gender difference among shy people, the result of the study conducted by Zalk, Karr & Tilton (2011) showed that shyness differs significantly with respect to gender. Yusuf (2013) and Isiaya (2015) found out that female students benefitted from modelling technique than the male counterparts in a study that was carried out on truancy among secondary school students. Based on these gender differences,

the researcher intended to investigate if there was any difference in shyness of male and female students.

As a result of the findings from the studies carried out by researchers above, this researcher therefore employed the use modelling technique on shyness among junior secondary schools' students. These techniques to the best knowledge of the researcher have not been used by any other person for modifying any behavioural problem such as shyness among secondary school students in Edo State. This is the gap the present study has filled.

Statement of the Problem

Attempts by parents, teachers and schools' managements to help children overcome shyness by way of advising have not yielded much positive results. Despite these efforts of parents, teachers and schools' managements to make students adjust in social environment, to feel secure and comfortable among themselves and to prevent the behavioural problem of shyness, the problem still persists. Some of the behaviours usually exhibited by shy students include; low self-esteem, embarrassment, lack of self–confidence in social situation, inability to express themselves, nervousness, insecurity, avoidance, constant social fear, and timidity.

Despite the numerous efforts made by previous researchers in finding solutions to the problem of shyness, the problem still persists with all its attendant negative consequences on the overall well-being of the students. This problem therefore necessitated this study and the researcher determined the effects of modelling techniques on shyness among junior secondary school students in Benin Metropolis of Edo State. From personal observation, students at this level experience shyness more than those in the senior secondary and it is hoped that the findings of this study will help to curb this problem of shyness before they get to senior secondary and tertiary institution.

Purpose of the Study

The main purpose of this study was to determine the effects of modelling techniques on shyness among junior secondary school students in Benin Metropolis of Edo State. Specifically, the study sought to determine;

1. The effect of modelling technique on shyness among junior secondary school students when compared with those treated with conventional counselling using their pre-test and post-test mean scores.

2. The effectiveness of modelling technique on shyness among male and female junior secondary school students using their pre-test and post-test mean scores.

Scope of the Study

The main focus of this study was to investigate the effects of modelling technique on shyness among junior secondary school students in Benin Metropolis of Edo State. Modelling is the independent variable while shyness is the dependent variable. The intervening variable is gender. The study focused on the use of modelling technique on shyness among JSS1&2 students. The classes used for this study were JSS1&2.

Research Questions

The following research questions guided the study.

1. What is the effect of modelling technique on shyness among junior secondary school students when compared with those treated with conventional counselling using their pre-test and post-test mean scores?

2. What is the effectiveness of modelling technique on shyness among male and female junior secondary school students using their pre-test and post-test mean scores.

Hypotheses

The following null hypotheses were stated and tested at 0.05 level of significance.

1. The effect of modelling technique on shyness among junior secondary school students will not be significant when compared with those treated with conventional counselling using their post-test scores.

2. There is no significant difference in the effectiveness of modelling technique on shyness among male and female junior secondary school students using their post-test scores.

Theoretical Framework

Albert Bandura Social Cognitive Learning Theory

Social cognitive learning theory was propounded by Albert Bandura in 1973. He theorized that social cognitive learning theory revolves around the process of knowledge acquisition or learning directly correlated to the observation of models. The uses of models in the development of appropriate behaviour, in the behaviour modification and learning have been well researched in literature. Modelling as a technique of behaviour counselling has shown that substantial reduction in fear can be achieved through modelling.

It has been demonstrated by Bandura (1973) when he studied a group of young children who had irrational or strong fear of dog. In the experiment, Bandura showed some of the fearful children a film of other children fondling dogs fearlessly. Another group of fearful children were made to watch other children play with dogs. In this experiment, the former is the symbolic or film model while the latter is a live model. The result indicates that both groups of children improved judged by their ability to approach and handle dogs without fear. However, it was noted that the group that was shown a live model made fast improvement. The above experiment indicates that clients can learn by observation, imitation and modelling. Therefore, counsellors should encourage clients to imitate acceptable behaviour exhibited by others in real life situations or films.

Bandura subsequently proposed social cognitive theory which suggests that behaviours can be taught and developed through modelling. The theory suggests that individuals gain knowledge and skills by observing behaviours which are displayed. The advantage of this type of learning is that it provides the learner with clear information on how best to perform the skills. The theory identifies four steps in the process of learning through modelling, (1) the individual must attend to the events being modelled, (2) modelled behaviour must be retained, (3) symbolic

representation of the behaviour is converted into appropriate actions similar to the originally modelled behaviour and (4) the individual must be motivated to replicate the modeled behaviour. He further explained that there are three main concepts of social cognitive theory. Firstly, from observing others, one can form a conception of how new behaviour patterns are performed and on later occasions the symbolic construction can serve as a guide for action. Secondly, one's mental state is an essential part of the process for learning which emphasizes the internal thought and cognition which help connect learning and behaviour. Thirdly, the theory recognizes that even though people can all learn something new, it does not mean that their behaviour will necessarily change. Artino (2007) in agreement with Bandura went further to say that human beings learn a great deal through observing others. Much social learning occurs through observation with or without direct rewards or reinforcements administered to the learner. For example, table manners, interpersonal relations and learning of some subjects depend on the above kind of learning. In other words, the major concepts of social learning model is that human behaviour is powerfully influenced by what he observes, hears, feels, perceives or participates in.

Modelling technique will prove excellent in teaching new behaviour through the use of live or symbolic models to be observed or imitated. Activities such as role-play, video self-modelling and many others, will no doubt help in bringing about a change in students with shyness. With the use of shaping and modelling techniques, shyness among junior secondary school students can be adequately handled because both techniques allow for full participation of shyness. From the foregoing, there is therefore an obvious relationship between Skinner's operant conditioning theory, Bandura social cognitive learning theory and the present study. The researcher thus anchored the present study on these theories.

METHOD

Research Design

The study adopted quasi-experimental research design, pre-test, post-test, control non-randomized groups. This design is suitable for adoption to approximate conditions of true experiment in situations that do not permit the control and manipulation of all relevant variables (Kpolovie, 2010). Nworgu (2015) argued that a quasi - experimental research design could be used in a school setting where it is not always possible to use pure experimental design which was considered as disruption of school activities.

In quasi-experimental design, samples are divided into experimental and control groups. In this study, one groups served as treatment group while other group served as the control group. The two groups were tagged Experimental Group I and Control Group. Participants in experimental group 1 were treated with modelling technique, while control group received conventional counselling with the school guidance counsellor.

Diagrammatical Structure of the Design of the Study

	Pre-test	Treatment	Post-test
E_1	O_1	X_1	O_2
C	O_1	X	O_2

Where:

E_1 = experimental group 1(modeling technique)

C= control group

X = conventional counselling

O_1 = pre test

O_2 = post test

Population of the Study

The population of this study was 327 students identified with shyness in JSS1 and JSS2. Available records showed there were 34 public co-educational junior secondary schools in Benin Metropolis of Edo State at the time of this study. 100 copies each of the SPS questionnaires were administered to the 34 public co-educational junior secondary schools, totally 3400 copies of the SPS questionnaires. The choice of public co-educational junior secondary school was to enable the researcher ascertain the effect of the techniques on male and female students in the same school setting. The choice of JSS1 and JSS2 students was also made in order to capture more participants and also to curb their shyness before they get to senior secondary school and tertiary institution. The JSS3 students were excluded on the account of their engagement with various lessons in preparation for their final examination which was to come up at the time of this study.

Sample and Sampling Technique

The sample for the study was 61 junior secondary school students who had the highest scores as identified through the pre-test instrument. This comprised of all the JSS1&2 students that were identified with shyness from the three co-educational secondary schools. The three schools were selected from the 34 public co-educational junior secondary schools that the researcher visited and administered the SPS questionnaires. Purposive sampling technique was used to select the three schools with the highest number of students with shyness. The students were used intact in their respective schools where each school served as a treatment group, comprising both male and female students. The first group served as experimental group1 with 30 students while the third group of 26 students served as the control group. Though a total of 61 students started the experimental and control groups, only 56 completed the treatment packages successfully.

Instrument for Data Collection

The instrument that was used for this study on shyness was Shyness Personality Scale (SPS) developed and validated in Nigeria by Akinade (2012). The instrument is divided into 2 parts,

initial part comprises of demographic information such as name of the respondent, class, address/school, date, age and sex of the respondents (i.e. male or female) and directions on how to fill the instrument. While the other part covers items of the instrument consisting of 50 items with 4 – point rating scale for each item to assess shyness of students. The instrument was used before and after the treatment sessions of modelling technique to the experimental group by the researcher with an interval of eight weeks between pre-test and post-test of the sampled groups in order to find out whether or not if there was an effect of independent variables upon the dependent variable. The control group received conventional counselling through the guidance counsellor.

Validation of the Instrument

Akinade Shyness Personality Scale (SPS) is a standardized instrument and was adopted by the researcher for this study. Akinade's shyness personality scale (SPS) has been found by psychometricians, counselling psychologists and psychologists to possess both face and construct validity.

Reliability of Instrument

The reliability of Shyness personality scale (SPS) was tested by Akinade (2012) who is the owner of the instrument by administering it to young people (sampled 30 students, 18 males and 12 female). SPS showed a test-retest reliability value of r = 0.79 after two weeks' interval for young people. When compared with Sections D, E and H of Student Problem Inventory (SPI) it revealed r= 0.77. Having this fact in place, the SPS was found to be reliable for this study.

Method of Data Collection

The researcher sought the permission of the school principals to conduct the study in their respective schools. After the permission was granted, the researcher further requested for a conducive classroom where the experimental treatment was administered. The students were given copies of the instrument to respond to. The researcher with the help of her two research assistants gave an introduction and how to complete the questionnaire to the students. The nature of the students' response and the purpose for which it would serve were clearly explained to the students. The researcher and the research assistants guided the students on how to respond to the questionnaire. The copies of the instrument were collected from the students immediately they were through in responding to the items. The result of the exercise made up for the pretest scores.

Training of Research Assistants

Three research assistants were trained to participate in the study. The research assistants were regular counsellors in the particular schools. They were assigned to assist the researcher in conducting activities in the modelling and the control groups respectively.

The research assistants were informed of the purpose of the study and the method to be used. The materials used in facilitating the sessions in their groups were given to the research assistants one week before the commencement of the treatment. They were required to read through the materials before attending the training session. During the sessions, the researcher discussed the materials with the assistants and supplied answers to their questions. The

counsellors were reminded of the teaching strategies and responsibility to maintain appropriate interpersonal behaviour.

1. Remembering their various roles as facilitators.

2. Specifying objective of each session.

3. Clarifying the prescribed activities.

4. Avoiding any form of punishment.

5. Reinforcing the students with frequent praise and encouragement.

The researcher met with research assistants on a weekly basis for supervision. The purpose of the meeting was to coordinate the session, planned activities both for the counsellors and students. In addition, the sessions enabled the counsellors to interact with each other and shared experiences and challenges as well as planned on how to coordinate the various counselling sessions.

Experimental Procedure

For the researcher to get the population of students with shyness, she visited 34 public co-educational junior secondary schools and administered 100 copies each of the SPS questionnaire. This was done with the help of the schools' counsellors and trained research assistants. The researcher obtained the consent of the school principal to carry out the research. The experimental training took place in the schools during school hours.

The treatment program was held for eight weeks each for the two groups. The JSS students who were identified as having shyness formed the groups. Each school with the highest number of shy students constituted a group. The experimental groups 1 was exposed to modelling technique. Group 2 was exposed to conventional counselling. The sessions were held three times a week for eight consecutive weeks each for 30-35 minutes. After the eight weeks each of treatment and the conventional counselling, the shy questionnaire was re-administered on all students in both the experimental and control groups and it was regarded as the post-test. The post test was collected by research assistants and given to the researcher for analysis. The researcher determined the statistical difference in scores between the experimental and control groups.

Control of Extraneous Variables

The researcher was very much aware of the possible effect of extraneous variables (gender, participation, mood, location, discrimination, method and time of the day) which if not well controlled could contaminate the study and possibly distort the findings. The researcher therefore adopted some measures to minimize and possibly control the distorting effects of such variables. Such measures to control the extraneous variables included:

1. The use of separate schools in the experimental treatment

2. The application of treatment to experimental groups and control group were held at different schools in order to guard against subject interaction contamination.

3. The application of analysis of co-variance (ANCOVA) because some extraneous variable may still remain uncontrolled.

Method of Data Analysis

The completed instrument was scored following the scoring instructions provided by shy questionnaire manual. The data relating to answering of the research questions were analyzed using the mean, while ANCOVA was used to test the null hypothesis at 0.05 level of significance.

The decision rule is that any student that scored above 125 which is the norm was regarded as being shy. The norm 125 was used in taking decisions. When the posttest mean score is below the norm, the treatment technique is said to be effective, but when the posttest mean score is above the norm, the technique is considered not effective. The treatment group with higher lost mean is said to be more effective.

RESULTS

Research Question 1

What is the effect of modelling technique on shyness among junior secondary school students when compared with those treated with conventional counselling using their pre-test and post-test scores?

Table 1: Pre-test and Post-test shyness mean scores of junior students treated with modelling technique and those treated with conventional counselling (Norm = 125)

Source of Variation	N	Pretest Mean	Posttest Mean	Lost Mean	Remark
Modelling Technique	30	143.83	86.67	57.16	Effective
Conventional Couns	26	139.08	126.73	12.35	

Table 1 reveals that the junior students treated with modelling technique had pre-test mean score of 143.83 and post-test mean score of 86.67 with lost mean 57.16 in their shyness, while those in the control group who received conventional counselling had pre-test mean score of 139.08 and post-test mean score of 126.73 with lost mean 12.35. With post-test mean score of 86.67 which is below the norm of 125.00 modelling technique is effective in reducing shyness among junior secondary school students.

Research Question 2

What are the differences in the effectiveness of modelling technique on the male and female secondary school students' shyness using their pre-test and post-test scores?

Table 2: Pre-test and Post-test shyness mean scores of male and female students treated with modelling technique

Source of Variation	N	Pretest Mean	Posttest Mean	Lost Mean	Remark
Male	13	137.15	83.08	54.07	
Female	17	148.94	89.41	59.53	More Effective

In table 2, it was observed that the male students treated with modelling technique had pre-test mean score of 137.15 and post-test mean score of 83.08 with lost mean 54.07 in their shyness, while the female students treated with modelling technique had pre-test mean score of 148.94 and post-test mean score of 89.41 with lost mean 59.53. With lost mean score of 59.53 for females which is greater than lost mean score of 54.07 for males, modelling technique is more effective in reducing female secondary school students' shyness.

Testing the Null Hypotheses

Null hypothesis 1

The effect of modelling technique on the shyness scores of junior secondary school students will not be significant when compared with those treated with conventional counselling using their post-test mean scores.

Table 3: ANCOVA on the effect of modelling technique on students' shyness when compared with those who received conventional counselling

Source of variation	SS	df	MS	Cal. F	Pvalue	P ≤ 0.05
Corrected Model	28554.077	2	14277.039			
Intercept	73.240	1	73.240			
Pretest	6196.877	1	6196.877			
Treatment groups	26125.411	1	26125.411	306.955	0.000	S
Error	4510.905	53	85.111			
Total	653619.000	56				
Corrected Total	33064.982	55				

Table 3 reveals that at 0.05 level of significance, 1df numerator and 55df denominator, the calculated F is 306.96 with Pvalue of 0.00 which is less than 0.05. Therefore, the second null hypothesis is rejected. So, the effect of modelling technique on shyness of secondary school students is significant.

Null hypothesis 4

The effectiveness of modelling technique on shyness scores of male and female secondary school students will not differ significant using their post-test mean scores.

Table 4: ANCOVA on the effectiveness of modelling technique on shyness of male and female students

Source of variation	SS	df	MS	Cal. F	Pvalue	P ≤ 0.05
Corrected Model	3513.082	2	1756.541			
Intercept	278.689	1	278.689			
Pretest	3217.456	1	3217.456			
Gender	84.067	1	84.067	0.824	0.372	NS
Error	2753.585	27	101.985			
Total	231600.000	30				
Corrected Total	6266.667	29				

In table 4, it was observed that at 0.05 level of significance, 1df numerator and 29df denominator, the calculated F is 0.824 with Pvalue of 0.372 which is greater than 0.05. Therefore, the fifth null hypothesis is accepted. So, the effectiveness of modelling technique on shyness of male and female secondary school students do not differ significantly.

DISCUSSION OF FINDINGS

Finding of this study revealed that modelling technique was significantly effective in reducing shyness among junior secondary school students in Benin Metropolis of Edo State. However, at the post-test, it was found that there was clear decrease in the level of shyness among the students treated with modelling technique than those in the conventional counselling group. This result is in accordance with the report of previous researcher such as (Cathy, 2013, Florence, 2012, Geral, 2013, Nnodum 2010), who found that modelling technique is significantly effective in changing maladaptive behaviours to adaptive behaviours.

Possibly, the students through the various activities carried out during the modelling technique experiment were able to adopt self-enhancing skills that encourage better social adjustment in school and other social gatherings. This may have brought about the decrease in their post-test shyness scores which signified that the students benefited from the experiment. In line with the finding above, Evans (2010) observed that modelling technique involves practicing and acting out behaviour responses within social situations them learn it and refine them as personal skills. Artino (2007) also noted that modelling provides an opportunity to register or encode the modelled behaviour and to recognize one's potential to reach a valued goal.

The findings of this study showed that modelling technique were more effective in reducing female junior secondary school students' shyness than their male counterpart. This signifies that female junior secondary school students benefited more from the treatment packages than the male students. This finding of the result is consistent with the reports of previous researchers who found that female students benefited more from behavioural counselling intervention techniques than the male students (Nnodum, 2010). The reason for the above

finding of the study may be because female students easily yield themselves to change, and are usually willing to participate in activities like the modelling technique experiments that involve less physical stress, especially when the environment is peaceful and interactive.

RECOMMENDATIONS

Consequent upon the findings of this study, the following recommendations were made.

1. In using modelling technique on students' shyness, counsellors, therapists and psychologists should be mindful of difference in students' gender.

2. Counsellors and therapists can adopt modelling technique in handling clients in the society with maladaptive behaviour such as shyness.

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