Kogi Journal of Education and Pedagogy (KOJEP), Vol. 4, No. 1, JUNE, 2025

ISSN 2736-0091
E-ISSN 2737-0107

EFFECTIVENESS OF MOTIVATIONAL ENHANCEMENT THERAPY IN MANAGING IN-SCHOOL ADOLESCENTS WITH SUBSTANCE USE DISORDER IN AKWA IBOM STATE, NIGERIA

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Abstract

Adolescents' problematic behaviours such as substance use disorder would naturally result in poor quality of life. Adolescents who are vulnerable in this respect certainly need help to overcome this problematic behaviour which could mar their future and total wellbeing. This study thus investigated the effectiveness of Motivational Enhancement Therapy (MET) in managing in-school adolescents with substance use disorderin Akwa Ibom State, Nigeria. The quasi-experimental pre-test post-test control group research design was used for the study. A multi-stage sampling process was used to select 197 adolescents (88 male and 109 female) with substance use disorder to participate in the study. There was one treatment group and one control group. The Youth Self-Report Checklist for Ages 11-18 was adapted and used to collect baseline data from about 220 students but only 197 qualified for the study. One research question and hypothesis were raised to guide the study. The data collected were analysed using descriptive and inferential statistics (ANCOVA). The study revealed a significant difference in the post-test mean scores on substance use disorder of the participants exposed to MET and the control group. It was recommended that School counsellors, school administrators, policy makers should incorporate MET in targeted based intervention on adolescents with substance use disorder.

Keywords: Adolescents, Problematic behaviour, Substance use disorder and Motivational Enhancement Therapy

Introduction

The developmental stage known as adolescence poses serious concern to the parents and to the adolescents themselves. Osarenren (2002) described adolescence as a period of crisis in which the adolescents see themselves no longer as children but as adults, whereas the parents still consider them as children. The adolescent seeks independence at this stage and maintains close ties with peers than the parents. Adolescence could define in various ways by different authorities. Adolescence is between the periods of 10- 18 years (American Psychology Association (APA, 2023). Adolescence is a period of change from childhood to adulthood and this critical developmental period is marked by several physical, mental and relational changes. According to Ikorok, Lawal, and Akpabio (2015), this stage of life falls in between childhood and adulthood. This generally correlates to the adolescent years (ages thirteen to eighteen). In essence, the definition of adolescence and the ages at which it begins and ends are relative to culture. Adolescent behaviour problems are diverse in nature. O'Regan, Doyle, Murray, McCarthy and Saab (2022) referred to these behaviours as challenging behaviours. According to them, these behaviours are common among adolescents. Adolescence problematic behaviours usually result in poor attention to self and the things that will contribute meaningfully to life. Such behaviour could bring about physical injuries, school failure and challenging in relating with other children and even adults. Some of the problematic behaviours exhibited by adolescents include drugs and substance abuse (Diwe, Aguocha, Duru, Uwakwe, Merenu&Nwefoh, 2016).

Ubangha, Ogunyemi, Makinde and Ajani (2013) defined a drug as any legal or illicit chemical that, when consumed, inhaled, or injected, alters the functioning and workings of the body and mind. It is any material other than food that, because to its chemical properties, influences the structure and function of a living organism. A drug is defined as any chemical that alters an individual's physical or mental function. Heroin, cocaine, marijuana, barbiturates, amphetamine, alcohol, coffee, and cigarettes are some of the often used substances. Others include codeine, inhalants, and narcotics (Namadi 2016). Substances are described as materials that can influence the functioning and structure of a live entity. According to Sahu and Sahu (2012), substance abuse is the detrimental use of psychoactive substances such as alcohol and illicit drugs. The most commonly misused substances include alcohol, marijuana, cough syrups, sedative tablets, brown sugar, heroin, cocaine, and tobacco (cigarettes). Substance abuse is associated with many harmful behaviour exhibited by the adolescents.

APA Dictionary of Psychology (2020) observed that substance use disorder (SUD) is often used as a corresponding term for substance dependence and sometimes applied to behavioural disorders, such as sexual, internet, and gambling addictions (these are non-chemical substances). According to Barros and Duval Neto (2021), Substance Use Disorder (SUD) is defined by the presence of negative consequences connected with substance use, such as effects on the user's health and social life, as well as economic concerns. It is important to note that, regardless of the severity of the problem, evidence-based therapy

ISSN 2736-0091
E-ISSN 2737-0107

including behavioural treatments and peer support groups can assist adolescents with SUD in achieving life balance and maintaining recovery. This study aims to manage adolescents with problematic behaviours such as substance use Adolescents who have been involved with multiple behaviour problems can be assisted to have their normal back by the use of empirically tested family and behavioural therapies by Counselling Psychologists. Motivational Enhancement Therapy (MET) is a brief style of psychotherapy for substance use issues, typically provided in four sessions or less (Crits-Christoph, Gallop, Temes, Woody, Ball, Martino, & Carroll, 2009). The choice of this therapy in managing in-school adolescents with substance use disorder is based on the fact this could help them in their social skill and in their psychological well-being.

Statement of the Problem

Adolescents tend to face myriads of behavioural problems which if nothing is done to help will mar their total well-being. Substance use disorder is one of the challenging behaviours dissipated by some adolescents which is capable of truncating peaceful co-existence. Drug and substance abuse by adolescent seem to have reached an alarming rate in the society. Some adolescents may try to explore with substances and stop, or continue to use sometimes with significant problems. Others may continue to a level that they cannot stop using substances despites significant harm to themselves, others and the society at large. Many issues associated with adolescent substance use disorder include school failure and an increase in school dropout rates, problems with peers, family, and other relationships, loss of interest in normal healthy activities, impeded memories, a greater possibility of contracting an infectious disease (such as HIV or hepatitis C) through risky sexual behaviour or sharing contaminated injection equipment, and mental health challenges. Researchers have employed so many interventions and the Motivational Enhancement Therapy has been effective in the treatment of drug abuse among adolescents and adolescents with multiple behavioural problems. But this intervention has not been used amongst in-school adolescents in Akwa Ibom state, Nigeria. Therefore, there is a gap in research in the use of Motivational Enhancement Therapy to reduce substance use disorder among adolescents in Akwa Ibom state, Nigeria. This research, then, shall examine the effectiveness of Motivational Enhancement Therapy in managing in-school adolescents with use disorderin Akwa Ibom State, Nigeria. The research will equip adolescents with skills to navigate the turbulent period of adolescence without being involved with drug and substances. The research will enhance parents with skills for drug free adolescents and other behavioural problems associated with adolescence. It will be beneficial to counsellors, life coaches, non-governmental organization, community leaders and the society in general.

Purpose of the study

This study seeks to evaluate the significant effect of Motivational Enhancement Therapy on participants' post-test mean scores on substance use disorder and the control group.

Research Question

One research question was answered in this study**:**

To what extent would there be any significant difference in the post-test mean scores on substance use disorders among participants in the two experimental groups?

Research Hypothesis

One hypothesis was raised to guide this study:

There will not be any significant difference in the post-test mean scores on substance use disorder of the participants exposed to treatment and the control group

Methodology

The research design for this study was quasi-experimental, with pre-test, post-test, and control group designs. The study used a quasi-experimental research approach because adequate participant randomisation is not practicable. (Ilogu, 2005; Nwadinigwe, 2005). Specifically, the study adopted the non-equivalent control group design for this study. This design is described as one of the most widespread experimental designs in educational research. It involves the treatment group and the control group being given a pretest and a posttest. It is particularly appropriate to research in schools (Campbell & Stanley, 1963). There was one treatment group which was exposed to Motivational Enhancement Therapy (MET). The other group was the control group. The design is represented as follows:

Treatment Group I: O_1 X_1 O_2- Motivational Enhancement Therapy

Control Group: O_3 C O_4 - Control group

Where

O_1, and O_2 represent pretest and posttest scores

O_3 C O_4 - Control group

X_1 represents treatment 1-Motivational Enhancement Therapy

C represents control group

Independent Variable: The independent variables in this study are Motivational Enhancement Therapy

ISSN 2736-0091
E-ISSN 2737-0107

Dependent Variables: Substance use disorder.
Moderating variable: Gender

The target population for this research was all Senior Secondary Two (SS2) students in Akwa Ibom State, Nigeria. This class is the most stable class in the Senior Secondary School. The sample size for this study was determined using power analysis, with a target power of 0.80 and a significance level of a 0.05. Based on these assumptions, a sample size of 220 participants was needed to detect a statistically significant difference between the experimental groups. A multistage sampling approach was employed to choose Senior Secondary School Two (SS2) students for the investigation. The initial part of the multi-stage sample process involved selecting three Local Government Areas in Akwa Ibom State from the Ikot Ekpene and Uyo Senatorial Districts by a hat and draw method. The second stage entailed selecting one Senior Secondary School from each of the three Local Government Areas using simple random sampling. The third stage entailed administering the youth self-report assessment for adolescents aged 11 to 18. The study included 197 adolescents (88 male and 109 female).

Instruments numbered 1 and 2 were adapted in this study adapted used to collect data in this study.
1. American Psychiatric Association Self-Administered Screening Tools Level 1 and 2 (2013)
2. Youth Self-Report Checklist For Ages 11-18 (Achenbach, 1991a**)**

Group one: Motivational Enhancement Therapy
Session 1: **Build a foundation for change**
The researcher created an environment in which the adolescents felt respected and understood. The researcher sought to establish confidence with the participants and appealed for their commitments and cooperation. The goals of this session were to meet the adolescent where they were and then work to begin the process of change.
Session 2: The researcher shared the overall goal of the Motivational Enhancement Therapy which is to motivate the individual to change undesirable behaviours. The goal of this session was to strengthen the individual's commitment to change. In this session the discussion plan for change was worked out.
Session 3: **Follow through strategy**.
The lessons of the previous sessions were reviewed. The objective of this session was outlined. The third session involved three elements: reviewing progress, renewing motivation, and redoing commitment. Participants were required to describe their experiences and how they coped with their practices during the week.
Session 4: Follow Through strategy continues
Participants were relaxed with indoor games and reward given to serious participants regarding their practice assignments.
Session 5: Action stage
The objective of this session was be outlined. The action stage entailed carrying out their plan. It was the busiest stage, necessitating the greatest amount of dedication, time, energy, and action. The ultimate goal at this level was to assist the teens in making significant and effective changes in their lives.
Session 6: The last session of treatment strengthened accomplishments adolescents have achieved. The researcher reinforced changes and assisted adolescents in developing clear plans for dealing with future challenges such as substance abuse relapse, family conflicts, or disappointments. Post-test administration of the instruments:
American Psychiatric Association Self-Administered Screening Tools Level 1 and 2 (2013) and Youth Self-Report Checklist for Ages 11-18 (Achenbach, 1991a) was carried out at the end of this session.
Group Three: This set of respondents received no therapy during the research. After the posttest, the respondents received assertiveness training.
Data collected were analysed using descriptive and inferential statistics. Inferential statistics include Analysis of Covariance (ANCOVA) where significant effect of treatment was noticeable. The hypothesis was analysed using the Analysis of Covariance and Fisher's protected t-test.

Results
Analysis of Hypothesis
Null Hypothesis: There will not be any significant difference in the post-test mean scores on substance use disorder of the participants exposed to treatment and the control group

Table 1: Descriptive Analysis of Substance Use Disorder Based on the Experimental Groups

Experimental Group		Pre-Test		Post-Test		
	N	**Mean**	**SD**	**Mean**	**SD**	Mean Difference
Motivational Enhancement Therapy	72	16.12	2.75	5.43	2.65	10.69
Control Group	50	16.12	2.54	15.96	2.20	0.16
Total	197	16.32	2.89	9.53	4.95	6.79

ISSN 2736-0091
E-ISSN 2737-0107

Descriptive analysis from Table 1 reveals that the mean score of students at pre-test for Motivational Enhancement Therapy (MET), and the control group were 16.12, and 16.12 respectively. During the post-test, the mean scores decreased to 5.43 and 15.96 respectively. Specifically, the MET had the greatest reduction based on the mean difference with 10.69 and 0.16 for the control group. Consequently, the Analysis of Covariance was conducted to ascertain if the differences were statistically significant in table 2.

Table 2: ANCOVA Result for Substance Use Disorder Based on the Experimental Conditions

Source of Variation	Sum of Squares	Df	Mean Squares	F-Cal	Sig.
Corrected Model	3569.215[a]	3	1189.738	187.310	.000
Covariate	282.438	1	282.438	44.466	.000
Experimental Group	3301.847	2	1650.924	259.918	.000
Error	1225.881	193	6.352		
Corrected Total	4795.096	196			

The ANCOVA results in Table 2 reveal that an F-calculated value of 259.918 was generated as the difference in mean scores of the participants in the two groups. The value was found to be significantly greater than the critical value of 3.07 utilising 2 and 193 degrees of freedom at the 0.05 level of significance. As a result, the null hypothesis was rejected, and the conclusion stated that there is a significant difference in the post-test mean scores of participants with substance use disorders exposed to MET over the control group.

Discussion of Findings

Findings from hypothesis two revealed that counselling interventions had significant effect on substance use disorder among participants exposed to treatments and the control group. The null hypothesis was rejected. MET had a significant effect on substance use disorder among participants exposed to treatment. MET had a high efficacy. These findings align with the study of Francati, et al. (2022), Asmita, Patil and Namita (2024) which showed that MET had significant effect in the reduction of substance use disorder.

Conclusion

This study highlighted the significant effects of motivational enhancement therapy in managing adolescents with substance use disorder. This behavioural challenge usually results in poor quality of life of the adolescents. The findings of this study provide clear evidence of the efficacy of motivational enhancement therapy in the reduction of substance use disorder. The findings revealed motivational enhancement therapy significantly decreases substance use disorder in adolescents. The study did not show any significant gender differences based on the intervention. Ultimately, the study on effectiveness of motivational enhancement therapy has provided invaluable insights for counsellors and educators in best way to integrate the intervention in managing adolescents' substance use disorder.

Recommendations

Based on the results of this study, the following recommendations are highlighted:

1. The school counsellors should embrace motivational enhancement therapy in managing adolescents with substance use disorder.
2. School administrators and policy makers should integrate motivational enhancement therapy in the training of counsellors and therapists in managing adolescents with substance use disorder.

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