



Effect of video-therapy on depression: implication for academic achievement among students of colleges of education north central, Nigeria

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Abstract

This study examined the effect of video-therapy on depression: implication for academic achievement among students of Colleges of Education North Central, Nigeria. Five objectives were achieved in the study. A comparative research was adopted for this study. Population for this study was 404 NCE (Nigeria College of Education) II in 4 Colleges of Education in the North Central, Nigeria. A sample of 84 NCE (Nigeria College of Education) II depressed students was used for the study. The study used Observation Grid; Computed examination results of the students; and computers, mobile and smartphones for data collection. A pre-test and post-test were conducted for both groups. Data was analyzed using mean and standard deviation and analysis of covariance (ANCOVA). Findings revealed significant effect video-therapy on the interest of depressed students in academic activities ($p=0.000<0.05$). Findings also revealed significant effect of video-therapy on reduction in the level of absenteeism and poor attendance ($p=0.000<0.05$). Findings of the study revealed significant effect of video-therapy on the resistance to intellectual effort of the students ($p=0.000<0.05$). Also, the findings revealed significant increase the socio-affective relationships of students ($p=0.001<0.05$). Finally, the findings revealed significant effect of video-therapy on academic achievement of students ($p=0.000<0.05$). The study concluded that Video-therapy can help depressed students to become psychologically stronger and progress in their academic achievement. It was recommended that school administrators should ensure that video-therapy programs are introduced in the schools to reduce depression among students and enhance academic achievement of depressed students.

Keywords: effect, video, therapy and depression

Introduction

Students who are emotionally well have fewer negative emotions and are able to bounce back from difficulties faster. These categories of students are able to hold onto positive emotions longer and appreciate the good times. The positive emotions give students a good sense of mindfulness; the motivation to studies; and gratification that enable them to feel more comfortable in their learning environment. This eliminates anxieties that may prevent them from being wholly engaged in a task as a result of depression.

Depression refers to a psychological mental disorder which is also called psychiatric cold (Ali, Murtuza and Fawad, 2004) ^[1]. Depression is also defined as psychiatric disorder and the common mental illness of present century which is known as psychiatric cold (Khurshid, Parveen, Yousuf and Chaudhry, 2015) ^[6]. Depression has negative effects on our behaviors such as loss of interest, productivity, and social contact. Shaikh and Chandio (2024) ^[11] noted that depression is a common disorder found in students which can directly impact their abilities to perform in life activities. According to Ali *et al.*, (2004) ^[1], depression leads to low productivity, loss of interest and social disassociation. Elgard and Arlet as cited in Wahab, Ismail, Zaid, Afsar and Rafique (2023) ^[14] posited that students with depression show signs like low self-esteem, guilt, helplessness, suicidal thoughts, and anger. They further stressed that students with depression often stop talking to other people, do not go to

class, and cry a lot. There is a relationship between depression and academic achievement.

Academic achievement refers to the average marks obtained by an individual in final examination (Fam and Yaacob, 2016). It has long been recognized as one of the important goals of education (Bossart, Doumen and Buyse, 2011) ^[2]. Academic achievement is commonly measured through examinations or continuous assessments but there is no general agreement on how it is best evaluated or which aspects are most important, procedural knowledge such as skills or declarative knowledge such as facts (Magnuson, 2007) ^[8]. Von-Stumm, Hell and Chamorro-Premuzic (2011) ^[13] noted that cumulative grade point average (GPA) and completion of educational benchmarks represent academic achievement of all students in tertiary institutions. In the context of this study, academic achievement is the completion of educational benchmarks of all students in secondary schools. To counsel students who are depressed and enhance high academic achievement them, video therapy could be adopted.

Video therapy refers to the use of video streamed over the internet to provide psychological counseling. According to Witherspoon (2020) ^[15], video-based therapy refers to as teletherapy. In the context of this study, it is a counseling services conducted over the internet by a school counselor using any device that has an internet connection, such as a computer, tablet, or smartphone. Edelbluth, Schwartz and Lutz

(2024) ^[5] assert that video-therapy increases coping skills of students. Video-therapy allows the counsellor to see the client's non-verbals. It also helps the therapist to know when they need to carry out the process to help shift the client in the therapeutic process, or when it might be better to move into a more supportive and "holding" approach while the client struggles with an emotion or thought for a long time. According to Yang, Wang, Sha, Guo, Deng, Wang and FU (2023) ^[16], video-based mental health intervention has the potential to reduce depressive symptoms among adolescents. They further stressed that videos are more preferred by young people as they are engaging, flexible and convenient and can reduce extraneous cognitive load. Yang, *et al.*, (2023) ^[16] added that video therapy plays positive role in creating emotional response and enhance empathy alongside provision of information and changing health-related outcomes of students. Paine, Fleming, McCallum and Sutcliffe (2020) ^[9] noted that video-therapy treats stress or low mood among depressed students. Early intervention, treatment and management of mental disorders through video-therapy may lead to significant improvements in school attendance (Lawrence, Dawson and Sawyer, 2019) ^[7]. Conceicao, Rothes, and Gusmao (2022) ^[3] noted that video-based depression stigma reduction intervention can be an essential tool to reduce depression stigma and improve help-seeking attitudes. Digital psychotherapeutic interventions according to Sriati, Kumiawan, Senjaya, Khoirunnisa, Muslim, Putri and Aghnia (2023) ^[12] are effective in reducing mental health problems associated with college students. Results of a study by Duncan, Patte, and Leatherdale (2022) ^[4] indicated the effects of mental health factors which are partially attenuated by education behaviors, suggesting while reduced class attendance and poor homework adherence were associated with both academic outcomes and mental health, they do not account entirely for the association between lower grades and worse mental health. The management of Colleges of Education in the North central, Nigeria has explored difference in intervention counseling programs for students ignoring video therapy which has been recognized as a great academic counseling tool due to its practical significance and intervention to emotional problems encounter by university students. In North Central, Nigerian today, an observation by the researcher revealed that many students of Colleges of Education show signs of depression. These students are always observed with persistent sadness or low mood; loss of interest or pleasure; changes in appetite or weight; sleep disturbances; fatigue or loss of energy; feelings of worthlessness or guilt; difficulty concentrating; irritability or anger; social withdrawal; and thoughts of self-harm or suicide. The students lack concentration and focus in the class; lack motivation and engagement and show high level of absenteeism and poor attendance in the school. This behaviour has direct impact on the educational progress and academic achievement. It is against this background that the study is designed to examine the effect of video-therapy on depression with implication for academic achievement among students of Colleges of Education in North Central, Nigeria.

Objectives

- Examine the effect of video-therapy on the interest of depressed students in academic activities.
- Examine the effect of video-therapy on reducing the level of absenteeism and poor attendance to school by depressed students.
- Determine the effect of video-therapy on resistance to intellectual effort of the students.
- Ascertain the effect of video-therapy on the socio-affective relationships of depressed students.
- Examine the effect of video-therapy on academic achievement of depressed students.

Methodology

Design

Comparative research was adopted for this study. This is because the study aimed at comparing two groups of students with a view to discovering their behaviour after treatment.

Population

The population for this study was 404 NCE (Nigeria College of Education) II students each from four (4) Colleges of Education in the North Central, Nigeria namely; Colleges of Education Ankpa, Kogi State; Colleges of Education Katsina-Ala, Benue state; Colleges of Education Akwanga, Nasarawa state; and FCT College of Education Zuba.

Sample

Two procedures were used for sample selection in this study: Firstly, Purposive sampling technique was used to select four states for the study. Secondly; a sample of 84 NCE (Nigeria College of Education) II depressed students was selected for this study. An observation grid was used to identify depressed students.

Instrument for data collection

The study employed the use of variety of devices, including computers, mobile and smartphones through Google Chrome versions 55+. Windows XP with Internet Explorer 7) was recommended for students. An Observation Grid was also used for the study. The survey scale which measures the degree of expression of the described behavioural manifestations of students has standardized Likert responses from 1 to 10, with a view to their degree of behaviour and their systematic notation, where 1 indicates absence of behaviour or very little presence, while 10 notation means the presence of behavior to a very large extent (Plesan, 2021) ^[10]. Examination result of the students was also used as instrument for data collection. The individual students grades were converted to values as A = 4, B = 3, C = 2 and D = 1 respectively.

Treatment procedure

- The students were divided into experimental and control groups.
- A pre-test was administered to both groups to determine their level performance in a depressed condition.

- Training was given to 42 depressed students (experiment group) on how to use computers, mobile and smartphones were used through Google Chrome versions 55+. Windows XP with Internet Explorer 7) join the video-therapy session.
- Video sessions were hosted and attended by experiment group for six days.
- The other 42 students who students control group did not participate in the vide-therapy sessions.
- After the video sessions were hosted and attended by experimental group for six days, the behavior manifestations of both groups were observed and recorded.
- Both the experimental and control groups were given enough time to prepare and participate in their examinations. Computed results of the students were also collected and used for data analysis.

Data analysis techniques

The data collected was analyzed using descriptive statistical tools such as mean and standard deviation. Analysis of covariance (ANCOVA) was used to test the null hypotheses at 0.05 level of significant.

Results

Table 1: Pre-test result of experimental and control groups

Group	N	Mean	Std. deviation	Mean difference
Experimental group	42	2.7686	0.71177	0.8659
Control group	42	1.9027	0.74366	
Total	84	2.3356	0.84588	

*N= Number of students in both groups

Source: Field survey, 2024

Result in Table 1 revealed that the pre-test means interest scores of students exposed to video-therapy and those who were not exposed to video-therapy was 2.7686 and 1.9027 respectively. The result also revealed the mean difference of 0.8659. This means that there is no significant difference in the mean scores of students during a pre-test.

Table 2: Mean difference of experimental and control groups on the interest in academic activities

Gender	N	Mean	Std. deviation	Mean difference
Experimental group	42	3.8304	0.40417	1.0785
Control group	42	2.7519	0.32844	
Total	84	2.1941	0.37003	

*N= Number of students in experimental and control groups.

Source: Field survey, 2024

Result in Table 2 revealed that students exposed to video-therapy had a mean score of 33.8304 while students and those who were not exposed to video-therapy had a mean a score of 2.7519. The mean difference between the two groups was 1.0785.

Table 3: Mean of experimental and control groups on the effect of video-therapy in reduction of level of absenteeism and poor attendance to school

Group	N	Mean	Std. deviation	Mean difference
Experimental group	42	66.1800	14.95541	28.55
Control group	42	37.6300	11.83955	
Total	84	51.905	13.39748	

*N= Number of students in experimental and control groups.

Source: Field survey, 2024

Result in Table 3 revealed that students exposed to video-therapy had a mean achievement score of 66.1800 while students and those who were not exposed to video-therapy had a mean achievement score of 37.6300. The mean difference between the two groups was 28.55.

Table 4: Mean scores of experimental and control groups the effect of video-therapy on the resistance to intellectual effort of depressed students

Group	N	Mean	Std. deviation	Mean difference
Experimental group	42	61.7900	6.47340	33.77
Control group	42	28.0200	7.39776	
Total	84	44.905	6.93558	

*N= Number of students in experimental and control groups.

Source: Field survey, 2024

Result in Table 3 shows that the mean score of experimental group was 61.7900 while the control group had mean retention score of 28.0200 respectively. The mean difference for the groups is 33.77.

Table 5: Mean scores of experimental and control groups on the effect of video-therapy on the socio-affective relationships of depressed students

Gender	N	Mean	Std. deviation	Mean difference
Experimental groups	42	61.1538	6.13056	8.742
Control group	42	69.8958	12.25481	
Total	84	65.3500	9.19268	

*N= Number of male and female students in experimental and control groups

Source: Field survey, 2024

Result in Table 6 reveals that the mean experimental group is 69.8958 while the control group had mean achievement score of 61.1538. The mean difference between the two groups was 8.742.

Table 6: Difference in mean achievement scores of experimental and control groups

Gender	N	Mean	Std. deviation	Mean difference
Female	42	69.8958	12.25481	6.915
Male	54	62.9808	15.55823	
Total	84	66.4383	13.90652	

*N= Number of students in experimental and control groups.

Source: Field survey, 2024

Result in Table 6 shows that the mean achievement scores of experimental group was 69.8958 while the mean achievement

score of control group was 62.9808. The mean difference between the experimental and control groups was 6.915.

Table 7: ANCOVA result on the mean interest rate of experimental and control groups

Source	SS	Df	MS	F	Sig.	PES	Remarks
Corrected model	38.010 ^a	2	19.005	35.869	.000	.267	Significant
Intercept	70.373	1	70.373	132.819	.000	.403	
Pretest	.527	1	.527	.994	.320	.005	
Group	38.005	1	38.005	71.730	.000	.267	
Error	104.379	37	.530				
Total	1233.436	84					
Corrected total	142.388	83					

** a. R Squared = .546 (Adjusted R Squared = .539), * $p < 0.05$, *SS = Sum of square, df = degree of freedom, MS = Mean square, F = value showing variance of the group, Sig = significant and PES = Partial Eta Squared

Source: Field Survey, 2024

Result in Table 7 revealed a p -value of 0.000 which is less than the alpha value of 0.05. Since the p -value is less than the alpha value, the result is significant meaning that video-therapy

increase the interest rate of depressed students in school activities.

Table 8: ANCOVA result of experimental and control groups on the effect of video-therapy on reduction in the level of absenteeism and poor attendance to school by depressed students

Source	SS	Df	MS	F	Sig.	PES	Remarks
Corrected model	41188.929 ^a	2	20594.464	114.008	.000	.536	Significant
Intercept	15381.633	1	15381.633	85.150	.000	.302	
Pre-test	433.804	1	433.804	2.401	.123	.012	
Group	39896.780	1	39896.780	220.862	.000	.529	
Error	35586.266	37	180.641				
Total	615601.000	84					
Corrected total	76775.195	83					

** a. R Squared = .546 (Adjusted R Squared = .539), * $p < 0.05$, *SS = Sum of square, df = degree of freedom, MS = Mean square, F = value showing variance of the group, Sig = significant and PES = Partial Eta Squared

Source: Field survey, 2024

Result presented in Table 8 revealed a p -value of 0.000 while the alpha value was 0.05. Since the p -value is less than the alpha value, the result is significant. This is an implication

video-therapy reduces the level of absenteeism and poor attendance to school by depressed students.

Table 9: ANCOVA result of experimental and control groups on the effect of video-therapy on resistance to intellectual effort of the depressed students

Source	SS	Df	MS	F	Sig.	PES	Remarks
Corrected model	57068.377 ^a	2	28534.188	590.539	.000	.857	Significant
Intercept	13968.830	1	13968.830	289.097	.000	.595	-
Pre-Test	47.732	1	47.732	.988	.321	.005	-
Group	56451.265	1	56451.265	1168.307	.000	.856	-
Error	9518.818	37	48.319	-	-	-	-
Total	469879.000	84	-	-	-	-	-
Corrected total	66587.195	83	-	-	-	-	-

** a. R Squared = .546 (Adjusted R Squared = .539), * $p < 0.05$, *SS = Sum of square, df = degree of freedom, MS = Mean square, F = value showing variance of the group, Sig = significant and PES = Partial Eta Squared

Source: Field survey, 2024

Result presented in Table 9 revealed a p -value of 0.000 which is less than the alpha value of 0.05. Since the p -value is less than the alpha value, the result is significant. This means that

video-therapy has reduces resistance to intellectual effort among depressed students.

Table 10: ANCOVA result of experimental and control groups on the effect of video-therapy on the socio-affective relationships of depressed students

Source	SS	Df	MS	F	Sig.	PES	Remarks
Corrected model	.459 ^a	2	.230	1.700	.188	.034	Significant
Intercept	28.104	1	28.104	208.165	.000	.682	-
Pretest	.305	1	.305	2.261	.136	.023	-
Group	.001	1	.001	.011	.001	.017	-
Error	13.096	37	.135	-	-	-	-
Total	793.488	84	-	-	-	-	-
Corrected total	13.555	83	-	-	-	-	-

** a. R Squared = .546 (Adjusted R Squared = .539), * $p < 0.05$, *SS = Sum of square, df = degree of freedom, MS = Mean square, F = value showing variance of the group, Sig = significant and PES = Partial Eta Squared

Source: Field Survey, 2024

Result presented in Table 10 revealed a p -value of 0.001 while the alpha value is 0.05. Since the p -value is less than the alpha

value, the result is significant. This implies that video-therapy increases socio-affective relationships of depressed students.

Table 11: ANCOVA result on the mean difference in the achievement scores of experimental and control groups

Source	SS	Df	MS	F	Sig.	PES	Remarks
Corrected Model	3348.857 ^a	2	1674.428	9.417	.000	.163	Significant
Intercept	4380.488	1	4380.488	24.635	.000	.203	
Pre-Test	2155.317	1	2155.317	12.121	.001	.111	
Group	1315.371	1	1315.371	7.397	.000	.071	
Error	17248.143	37	177.816				
Total	460166.000	84					
Corrected Total	20597.000	83					

*a. R Squared = .857 (Adjusted R Squared = .856), * $p < 0.05$, *SS = Sum of square, df = degree of freedom, MS = Mean square, F = value showing variance of the group, Sig = significant and PES = Partial Eta Squared

Source: Field survey, 2024

Result in Table 11 revealed a p -value of 0.000 which was less than the alpha value of 0.05. Since the P -value is less than the alpha value, the result is significant. This indicates that video-therapy enhances academic achievement depressed students.

Discussion of findings

The following findings emerged from the study based on the research questions answered and hypotheses tested:

The findings of the study revealed that video-therapy has a significant effect on the interest of depressed students in academic activities. The finding affirms that of Yang, Wang, Sha, Guo, Deng, Wang and FU (2023) ^[16] which reported that video-therapy is more preferred by young people as they are engaging, flexible and convenient and can reduce extraneous cognitive load thereby increasing their interest in academic activities.

The results of the study also revealed that video-therapy has a significant on reduction of the level of absenteeism and poor attendance to school by depressed students. The findings were not different from that of Lawrence, Dawson and Sawyer (2019) ^[7] which revealed that, early intervention, treatment and management of mental disorders through video-therapy may lead to significant improvements in school attendance. Also, the finding collaborates a report by Duncan, Patte, and Leatherdale (2022) ^[4] which indicated that mental health factors reduce class attendance to school.

The findings of the study also revealed that video-therapy has

a significant effect on the on resistance to intellectual effort of the depressed students. The finding conforms to that of Yang, *et al.*, (2023) ^[16] who reported that video therapy plays positive role in creating emotional response and enhance empathy alongside provision of information and changing health-related outcomes of students. The finding also agrees with Sriati, Kumiawan, Senjaya, Khoirunnisa, Muslim, Putri and Aghnia (2023) ^[12] who found out the effectiveness of digital psychotherapeutic interventions in reducing mental health problems among students.

Also, the results of the study revealed that video-therapy on increasing the socio-affective relationships of students. The finding did not differ from that of Paine, Fleming, McCallum and Sutcliffe (2020) ^[9] which noted that video-therapy treats stress or low mood among depressed students. The finding also agrees with Conceicao, Rothes, and Gusmao (2022) ^[3] who found out that video-based depression stigma reduction intervention can be an essential tool to reduce depression stigma and improve help-seeking attitudes.

Finally, the findings of the study revealed that video-therapy has significant on enhancing academic achievement of depressed students. The finding conforms to report of Edelbluth, Schwartz and Lutz (2024) ^[5] which revealed that video-therapy increases coping skills of students. The finding also affirms a report by Duncan, Patte, and Leatherdale (2022) ^[4] which indicated that mental health factors reduce class academic outcomes.

Conclusion

Depression has been recognized as a major psychological problem found among secondary school students today. The disorder is caused by different factors either at home or in schools. This study has established the efficacy of video-therapy on curbing depression among student. The study concludes that Video-therapy can help depressed students to become psychologically stronger and progress in their academic achievement.

Recommendations

Based on the findings of the study, the following recommendations are made:

- The school administrators should ensure that video-therapy programs are introduced in the schools to stimulate the interest of depressed students in academic activities.
- The parents students should provide their children with equipment for conducting video-therapy in order to reduce the level of absenteeism and poor attendance to school usually observed in depressed students.
- Depressed students should be given adequate time by their parents and teachers to attend video-therapy session that reduces resistance to intellectual effort.
- Special time should be allocated on the school timetables for the conduct of video-therapy sessions in order to increase the socio-affective relationships of depressed students.
- The school guidance/counselors should be trained on how to conduct video-therapy session as it is key to academic achievement of depressed students.

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