COUNSELLING MEDIA AND SUICIDAL IDEATION AMONG UNDERGRADUATES IN A NIGERIAN UNIVERSITY

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Abstract: Research suggests that protecting client's identity may be one way of helping clients on suicidal ideation seek and sustain counselling relationships. The rising spate of suicidal attempts and behaviour among students demands that practical ways of protecting the identities of such clients is getting more imperative day by day. The study investigated the prevalence of suicidal ideation among the undergraduates of a Nigerian university. It determined the individual and relative effectiveness of face-to-face, online and blended media of counselling on suicidal ideation, and the moderating influences of self-concept and peer relationship. The study adopted a pre-test, post-test experimental control group design and a sample of 1200 undergraduates selected by multi-stage sampling. Data were collected using the "Adult Suicidal Ideation Questionnaire" developed by Reynolds (1991) and were analyzed using Kruskal Wallis H-test, Wilcoxon ranked test, ANCOVA and Two-way ANOVA. The results showed that although, all the three counselling media were found to be effective on suicidal ideation, the blended media was found to be the most effective (F= 7.511, $p < 0.05$). Self-concept had a significant moderating influence on the three counselling media (F= 8.952, $p < 0.05$) while peer relationship did not (F= 3.152, $p > 0.05$). The study concluded that a blended approach combining f-t-f and online counselling media would appeal more to student clients who demonstrate suicidal ideation.
Keywords: Suicidal Ideation, Counselling Media, Effectiveness, Face-to-Face, Blended, Online

INTRODUCTION

Suicide, a multifaceted self-annihilating behaviour, has been established a key global public health concern by the World Health Organization. With a worldwide mortality rate of 16 per 100,000, suicide translates to one death every

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40 seconds and results in the death of almost one million people every year (Reddy, 2010). Also, according to World Health Organization (WHO), Nigeria has the 13th highest suicide mortality rate in Africa, of 9.5 per 100,000 above the regional average of 7.4 (WHO, 2018). As a matter of fact, persistent reports about suicide cases among Nigeria youth especially University undergraduate are making the headlines in the dailies.

For example, a 500-level Urban and Regional Planning student of Ladoke Akintola University of Technology, Ogbomosho hung himself from his ceiling fan while his roommate was out. Another student of Babcock University, Ogun State, who was just 19 years old at the time of his death, committed suicide in his parents' home at Lagos (Ezeobi, 2017). In 2019 alone, reported cases of suicide death was very rampant in national dailies and other media outfits (Stephen, 2020). Specifically, in Obafemi Awolowo University, over the last four academic sessions, about twenty-one students have reportedly committed suicide. According to the data collected from the Medical and Health services in the university, eight students were said to have committed suicide in the 2015/2016 academic session; four students in 2016/2017; three students in 2017/2018 and six students in 2018/2019. According to Cummings and Cummings (2012), every completed suicide stem from first having the thought, often referred to as suicidal ideation.

Suicidal ideation is when an individual is having the thought of killing himself/herself. Thus, the individual thinks "my family would be better off without me", or "life is worthless", showing thoughts of death, pain and hopelessness through artistic expression, but has not yet formulated a specific plan. People in this stage are vulnerable to suicide. For a person to commit or attempt suicide, the individual must have thought about doing so, planned about the execution and even sometimes, penned down note for family members or loved ones on why they are ending their life; these are suicidal ideation.

There are numerous risk factors related to suicidal ideation, attempts, and completion including depression, overweight, family socio-economic status, loneliness, insufficient social support and connectedness, conduct problems, mental ill-health, parental separation and inadequate parental attachment, adversities during childhood, being attacked and insulted, feeling hopeless and unhappy, impulsivity (Hawton, Saunders, & O'Connor, 2012; Klonsky, May, & Saffer, 2016).

One form of treatment that is often employed in modern times in treating patients with suicidal ideation is Cognitive Behavioural Therapy (CBT) (Kumar

et al, 2017). Its goal is to modify pattern of thinking or behaviour that spurs individual's suicidal ideation and also change the way the person feels. Cognitive behavioural therapy can be used via face-to-face counselling, online counselling or blended medium of counselling. The face-to-face counselling is often regarded as the conventional form of counselling. It takes place when a counsellor physically interacts with a client in a private and confidential setting to explore a difficulty or challenge the client may be experiencing. Meanwhile, the online counselling which is sometimes referred to as e-counselling or internet counselling is a relationship whereby a professional counsellor provides counselling services on the internet in form of e-mail, chat, video or even internet phone (Omotehinse & Adebowale, 2020). Moreover, the combination of face-to-face counselling and online counselling gives rise to blended counselling. This often involves the physical presence of both the counsellor and the client, and also communication via online.

Despite the availability of the traditional face-to-face counselling services in many institutions, usage of mental health services among university students appears to be relatively low. For example, Okunaiya and Omovre (2021) found that there was low utilization of face-to-face counselling services among undergraduates in Nigeria universities. It should be noted that there could be many reasons why individuals might not want to seek traditional face-to-face counselling (Gilat, Tobin, & Shahar, 2011). For instance, some people are generally not comfortable with self-disclosure (Haroz *et al* 2017). It is unclear if protecting the victim's identity through online or blended counselling media may improve the patronage of counselling services for suicidal ideation and self-disclosure.

The present study was conducted to investigate the prevalence of suicidal ideation among the undergraduate students of Obafemi Awolowo University, Ile-Ife, Nigeria and also to examine the individual and relative effectiveness of three counselling media on suicidal ideation among the undergraduate students.

Research Questions

1. What is the prevalence of suicidal ideation among the undergraduate students of Obafemi Awolowo University?
2. What is the individual and relative effectiveness of face to face, online and blended media of counselling on suicidal ideation among the undergraduate students?

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3. What are the moderating influences of socio-personal factors (self-concept and peer relationship) on face to face, online and blended media of counselling?

METHODOLOGY

The population for the study consists of all the 35,386 undergraduates during the 2018/2019 academic session. The sample comprised 1200 students selected through multi-stage sampling. For the first part, 150 undergraduates were selected by stratified random sampling from each of the eight undergraduate hostels on campus (blocks of hostels served as the strata). In other words, a total of 600 undergraduates were randomly selected from each of the female and male hostels, making up the 1200 respondents. Secondly, twenty students that scored high on suicidal were purposively selected to form the final part of the data collection.

The instrument for the study comprised four sections. Section A sought the demographic information of the respondents such as faculty, age, level, sex, etc. Section B contained 20 items on self-report suicidal ideation adapted from Adult Suicidal Ideation Questionnaire (Reynolds, 1991) and rated on a four-point Likert response scale. Responses to each item on the Suicidal Ideation Scale range from Always to Never and were scored 4, 3, 2 and 1 respectively. In line with the procedure adopted by the developer of the original instrument, a total score was obtained across all items in the set, and those who scored 40 or less were said to exhibit low level of suicidal ideation, respondents that scored 41 to 55 were said to exhibit moderate level of suicidal ideation, while respondents who scored above 55 were adjudged to exhibit high level of suicidal ideation.

The procedure for data collection involved randomly allocating participants into experimental and control groups. The experimental group consisted of groups A, B, and C which were exposed to face-to-face, online and blended counselling respectively while the control group D received no counselling. For online counselling, each participant was able to access the university's online counselling website via the link, www.onlinecounsellors.oauife.edu.ng on their e-portal page. For the Face-to-face Counselling, the face-to-face counselling sessions took place inside the counselling laboratory at the Department of Educational Foundations and Counselling and lasted for a period of six weeks. For treatment through blended counselling, Counselling sessions were held via online and face-to-face for six weeks.

The control group were only subjected to placebo treatment. The researcher re-administered the questionnaire to the participants so as compare the result with the experimental groups in a bid to find out the effectiveness of cognitive behavioural therapy on the experimental groups. However, after the retrieving the questionnaires from the participants, there were few interactions. Data from the treatments were collected and analyzed using quantitative approaches such as Kruskal-Wallis H test, Wilcoxon ranked test, ANCOVA and Two-way ANOVA.

FINDINGS AND DISCUSSIONS

The findings of this research work are the result of analyzing the data that were collected from the treatments in answering the following research questions:

Research Question 1: What is the prevalence of suicidal ideation among the undergraduate students? To answer this question, the students' responses to Section B of the questionnaire on suicidal ideation were scored as described earlier. The resulting scores obtained from individual items were summed together and made to represent respondents' measure on suicidal ideation. On the scale, the minimum and maximum scores were 20 and 79 respectively, the mean value was 26.39, while the standard deviation was 10.27. On the scale, those who scored between 40 or less were said to exhibit low level of suicidal ideation, students who scored between 41 and 55 were said to exhibit moderate level of suicidal ideation, while students who scored above 55 were said to exhibit high level of suicidal ideation. These levels of suicidal ideation were subjected to descriptive analysis and the result is presented in Table 1.

Table 1
Level of suicidal Ideation among Undergraduates of Obafemi Awolowo University

Suicidal Ideation	Frequency	Percent
Low	937	89.6
Moderate	75	7.2
High	34	3.3
Total	1046	100.0

Table 1 presents the level of suicidal ideation among undergraduates under study. From the table, majority of the respondents (89.6%) demonstrated low level of suicidal ideation, 7.2% of the respondents demonstrated a moderate level of suicidal ideation, while only 3.3% of the respondents demonstrated high level of suicidal ideation.

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To further this study, students who demonstrated high levels of suicidal ideation were contacted and invited for experiment using the three counselling media (Face-to-Face, Online and Blended counselling media). Each of the counselling media served as separate experimental group, while there was also the control group. In all, only twenty (20) students responded and showed willingness in participating in the experiments. Thus, research questions two and three were based on the data collected before (pre-test) and after the experiment (post-test).

Research Question 2: What is the individual and relative effectiveness of face to face, online and blended media of counselling on suicidal ideation among the undergraduate students? To answer this question, three approaches were adopted. In the first approach, differences are sought in pre-test scores of the three groups to determine the effectiveness of the participants' assignment into experimental groupings. These were subjected to Kruskal-Wallis H-Test and the result is presented in Table 2.

Table 2
Differences in the Pre-Test Scores of the Students Assigned to the Three Counselling Media

Counselling Media	N	Mean Rank	Chi-Square	df	Sig.
FTF	5	9.70			
Online	5	4.70	4.107	2	0.128
Blended	5	9.60			
Total	15				

Table 2 presented the difference in the pre-test scores of the respondents assigned to the three counselling media (face-to-face, online and blended). The result showed that there was no significant difference in the pre-test scores of the groups as the p value is greater than 0.05 threshold. Any difference observed in their mean ranked can be attributed to sampling error or mere chance. Thus, the selection of participants into groups cannot be said to be biased.

In the second approach, the individual effectiveness of each of the therapy was explored. To achieve this, the respondents' scores obtained in Section B of the questionnaire were subjected to Wilcoxon Ranked Test. That is, the individual effectiveness of face to face, online and blended counselling media on suicide, measures before the experiment (pre-test) and measures after the experiment (post-test) were subjected to Paired Sample T-test. The result is presented in Table 3

Table 3
Individual effectiveness of Face-to-Face, Online and Blended Media of Counselling on Suicidal Ideation among the Undergraduate Students

Counselling Media	Mean	N	Std. Deviation	Z	Sig. (2-tailed)
Face-to-Face					
Pre-Test	50.8000	5	5.97495	-2.032[b]	0.042
Post-Test	25.2000	5	25.2000		
Online					
Pre-Test	43.2000	5	5.67450	-2.032[b]	0.042
Post-Test	26.0000	5	4.30116		
Blended					
Pre-Test	51.6000	5	9.34345	-2.023[b]	0.043
Post-Test	24.6000	5	4.97996		
Control					
Pre-Test	55.6000	5	6.26897	-1.732	0.083
Post-Test	55.5400	5	6.23643		

Table 3 showed the individual effectiveness of face to face, online and blended media of counselling on suicidal ideation among the undergraduate students. The table also presented the relative effectiveness of the pretest and posttest for the control group. From the table, the three counselling media were found to be effective on suicide ideation as the p values for the three media were less than 0.05 significant level. For face-to-face counselling, results showed the mean for pre-test (50.8000) and post-test (25.2000), and p value < 0.05. This means that respondents were less at risk of having suicidal ideation after being exposed to face-to-face counselling medium. Also, for online counselling method, results showed the mean for pre-test (43.2000) and post-test (26.0000), and p value < 0.05. This implies that those exposed to online counselling became less prone to suicidal ideation after the experiment. The table showed the result for those exposed to blended counselling medium. The table showed the mean for pre-test (51.6000) and post-test (24.6000), and p value < 0.05. This also means that those exposed to blended counselling medium were less predisposed to suicidal ideation after the experiment than they were before the experiment. However, those in the control group had no improvement in suicidal ideation as the p value is greater than 0.05, confirmed by the little or no differences observable in the mean scores of their pretest (55.6000) and posttest (55.5400). Thus, it can be concluded that the three counselling media had individual effectiveness in treating suicidal ideation.

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In the third approach, the relative effectiveness of the counselling media was explored, and to achieve this, the post-test data were subjected to Analysis of Covariance (ANCOVA) using the three counselling media with control group as the differentiating variable and the pretest score as the covariate. The results are presented in Table 4

Table 4
Relative Effectiveness of Face to Face, Online and Blended Media of Counselling on Suicidal Ideation

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	5506.200ᵃ	4	1376.550	29.426	0.000	0.771
Intercept	20391.840	1	20391.840	435.909	0.000	0.926
Treatment	4452.100	1	4452.100	95.171	0.000	0.731
Counselling Media	1054.100	3	351.367	7.511	0.001	0.392
Error	1637.300	35	46.780			
Total	70346.000	40				
Corrected Total	7143.500	39				

a. R Squared = .771 (Adjusted R Squared = .745)

Table 4 showed the relative effectiveness of face to face, online and blended media of counselling on suicidal ideation among the undergraduate students. The result showed that $F = 7.511$, $p < 0.05$ for counselling media. This implies that there is a significant relative effectiveness of the three media of counselling on suicidal ideation. Also, the result showed the R-squared value to be 0.771 but the Adjusted R-square value was at 0.745. This can be interpreted to mean that although, the three counselling media can account for a maximum of 77.1% and a realistic value of 74.5% of the variance observed in respondents' suicidal ideation. Furthermore, to determine the position of the significance, a Pairwise Comparison analysis was then carried out on the three counselling modes. Result was presented in Table 5.

Table 5
Pairwise Comparison of Relative Effectiveness of Face to Face, Online and Blended Media of Counselling on Suicidal Ideation

(I) Modes	(J) Modes	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
					Lower Bound	Upper Bound
Control	FTF	10.300[*]	3.059	0.002	4.090	16.510
	Online	13.700[*]	3.059	0.000	7.490	19.910
	Blended	10.200[*]	3.059	0.002	3.990	16.410
FTF	Control	-10.300[*]	3.059	0.002	-16.510	-4.090
	Online	3.400	3.059	0.274	-2.810	9.610
	Blended	-.100	3.059	0.974	-6.310	6.110
Online	Control	-13.700[*]	3.059	0.000	-19.910	-7.490
	FTF	-3.400	3.059	0.274	-9.610	2.810
	Blended	-3.500	3.059	0.260	-9.710	2.710
Blended	Control	-10.200[*]	3.059	0.002	-16.410	-3.990
	FTF	.100	3.059	0.974	-6.110	6.310
	Online	3.500	3.059	0.260	-2.710	9.710

*. The mean difference is significant at the .05 level.

Table 5 revealed that there was a significant difference between students exposed to face-to-face, online and blended counselling media as opposed to those in the control group (p<0.05). It was also revealed that those exposed to face-to-face counselling medium had lesser suicidal ideation than those in control group with a mean difference of 10.300 (p<0.05). It was also revealed that those exposed to online counselling had lesser suicidal ideation than those in control group with a mean difference of 13.700 (p < 0.05). While those exposed to blended counselling medium also had lesser suicidal ideation than those in control group with a mean difference of 10.200 (p < 0.05). This shows that there was a significant relative effectiveness of face to face, online and blended media of counselling on suicidal ideation among the undergraduate students, with those exposed to online counselling performing better (Mean = 13.700) in comparison to the control group, than those exposed to face-to-face counselling (Mean = 10.300) and blended counselling (Mean = 10.200). However, none of the three counselling media was found to be better than another as the p values for their comparisons were greater than 0.05 threshold.

Research Question 3: What are the moderating influences of socio-personal factors (self-concept and peer relationship) on face to face, online and blended media of counselling? To answer this question, the moderating influences of self-concept and peer relationship were treated separately. Firstly, responses of the respondents to Section C of the questionnaire measuring self-concept were

scored in such a way that Strongly Disagree was allotted 4, Agree was allotted 3, Disagree was allotted 2 and Strongly Disagree was allotted 1. These scoring procedures were reversed for negative items like items 2, 3, 4, 12, 14, 16, 17 and 18. These were summed up to represent respondents' measure on self-concept. To answer the research question, the measures on suicidal ideation, self-concept and the three counselling media were subjected to Two Way ANOVA. The results were presented in Table 6

Table 6
Moderating Influence of Socio-Personal Factor (Self-Concept) on Face to Face, Online and Blended Media of Counselling

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	1479.700[a]	14	105.693	16.777	0.003
Intercept	12991.043	1	12991.043	2062.070	0.000
Counselling Media	356.657	3	118.886	18.871	0.004
Self-Concept	377.300	8	47.162	7.486	0.020
Counselling Media * Self-Concept	169.200	3	56.400	8.952	0.019
Error	31.500	5	6.300		
Total	18564.000	20			
Corrected Total	1511.200	19			

a. R Squared = .979 (Adjusted R Squared = .921)

Table 6 presented the test of the moderating influence of self-concept on face to face, online and blended counselling media. It can be seen from the table that the F-value obtained for the moderation was 8.952 at p-value of 0.019. Since the p-value is less than 0.05 threshold, the moderating effect can be said to be significant, that is, self-concept has significant moderating influence on the three counselling media. Also, it can be observed that the R-squared value rose to 0.979 but the Adjusted R-squared value was depressed to 0.921. This can be interpreted to mean that, the moderation of self-concept can account for a maximum of 97.9% and a realistic value of 92.1% of the variance observed in the three counselling media. In order to determine the position of the significance, a Multiple Comparison analysis was then carried out on the moderating influence of self-concept on the three counselling media and the result was presented in Table 7

Table 7

Multiple Comparison of the Moderating Influence of Self-Concept on Face to Face, Online and Blended Media of Counselling on Suicidal Ideation

(I) Modes	(J) Modes	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Control	FTF	15.8000*	1.58745	0.001	9.9424	21.6576
	Online	15.0000*	1.58745	0.001	9.1424	20.8576
	Blended	16.4000*	1.58745	0.001	10.5424	22.2576
FTF	Control	-15.8000*	1.58745	0.001	-21.6576	-9.9424
	Online	-0.8000	1.58745	0.955	-6.6576	5.0576
	Blended	0.6000	1.58745	0.980	-5.2576	6.4576
Online	Control	-15.0000*	1.58745	0.001	-20.8576	-9.1424
	FTF	0.8000	1.58745	0.955	-5.0576	6.6576
	Blended	1.4000	1.58745	0.815	-4.4576	7.2576
Blended	Control	-16.4000*	1.58745	0.001	-22.2576	-10.5424
	FTF	-0.6000	1.58745	0.980	-6.4576	5.2576
	Online	-1.4000	1.58745	0.815	-7.2576	4.4576

Based on observed means.

The error term is Mean Square (Error) = 6.300.

*. The mean difference is significant at the .05 level.

Table 7 revealed that there was a significant difference in the moderating influence of self-concept of students exposed to face-to-face, online and blended counselling media as opposed to those in the control group (p<0.05). It was also revealed that those exposed to face-to-face counselling medium had lesser suicidal ideation than those in control group with a mean difference of 15.8000 (p<0.05). It was also revealed that those exposed to online counselling had lesser suicidal ideation than those in control group with a mean difference of 15.0000 (p < 0.05). While those exposed to blended counselling medium also had lesser suicidal ideation than those in control group with a mean difference of 16.4000 (p < 0.05). This shows that there was a significant moderating influence of face to face, online and blended media of counselling on suicidal ideation among the undergraduate students. Also, it could be seen from the result that those exposed to blended counselling showed better self-concept (Mean = 16.4000) in comparison to the control group, than those exposed to face-to-face counselling (Mean = 15.8000) and online counselling (Mean = 15.0000). However, none of the three counselling media was found to be better than another in regards to students' self-concept as the p values for their comparisons were greater than 0.05 threshold.

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Secondly, responses of the respondents to Section D of the questionnaire measuring peer relationship were scored in such a way that Never was allotted 1, Sometimes was allotted 2, Once or Twice a Month was allotted 3, Once a Week was allotted 4, Several Times a Week was allotted 5 and Every day was allotted 6. These were summed up to represent respondents' measure on peer relationship, after which, the measures on suicidal ideation, peer relationship and the three counselling media were subjected to Two-Way ANOVA. The results are presented in Table 8

Table 8
Moderating Influence of Socio-Personal Factor (Peer Relationship) on Face to Face, Online and Blended Media of Counselling

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	1480.450[a]	16	92.528	9.027	0.047
Intercept	15576.252	1	15576.252	1519.634	0.000
Modes	336.500	2	168.250	16.415	0.024
Peer Relationship	511.250	12	42.604	4.157	0.134
Counselling Media * Peer Relationship	36.000	1	36.000	3.512	0.158
Error	30.750	3	10.250		
Total	18564.000	20			
Corrected Total	1511.200	19			

a. R Squared = .980 (Adjusted R Squared = .871)

Table 8 presents the test of the moderating influence of peer relationship on face to face, online and blended counselling media. It can be seen from the table that the F-value obtained for the moderation was 3.512 at p-value of 0.158. Since the p-value is in excess of 0.05, the moderating effect cannot be said to be significant, that is, peer relationship has no significant moderating influence on the three counselling media. It can be observed that although the R-square value rose to 0.980 but the Adjusted R-square value was depressed to 0.871. This can be interpreted to mean that although, the moderation of peer relationship can account for a maximum of 98.0% and a realistic value of 87.1% of the variance observed in the three counselling media. This cannot be attributed directly to the moderation of peer relationship on the counselling media. It may be due to sampling error or mere chance.

Discussion of Findings

Research question one investigated the prevalence of suicidal ideation among the undergraduate students of Obafemi Awolowo University. The result showed that suicidal ideation among the students was low, as 89.6% of the

students, who form the majority had low level of suicidal ideation. This result is consistent with the one conducted among Malaysian undergraduates by Choi, Shminan, Barawi, Khan, Rathakrishnan and Choi (2021). Also, the findings of Mamun, Rayhan, Akter and Griffiths (2020) conducted among undergraduates in Bangladesh supported the findings of this current study. However, some other researches were found to negate this current study. For instance, Akram, *et al* (2020) in a UK University, revealed that majority of the students exhibited high level of suicide ideation. Also, in another study Ram, Chaudhury and Jagtap (2018) among university students in India, showed that the level of suicidal ideation was high. The dichotomies among these studies could be due to diverse reasons. However, prominent among them could be the differences in the measuring scale and level of measurements among these diverse studies. Geographical differences may also account for some of these differences. More specifically, the low level of suicidal ideation among students of Obafemi Awolowo University may be tied with the high level of religiosity among the students of the institution who are known for high level of religiosity (Abati & Elesemoyo 2019), whereas, religiosity have been found to predict lower depression and suicide level (Lester, 2017; Tettey, 2014).

Results further showed the effectiveness of these counselling media on suicidal ideation both on the individual and relative levels. On an individual level, the three counselling media were found to be effective in the treatment of suicidal ideation among the students. For instance, those exposed to face-to-face counselling were found to exhibit less suicidal ideation when compared to their initial stage before the counselling. Also, those exposed to online counselling were found to exhibit less suicide ideation when compared with their entry level. This was also same for those exposed to blended counselling medium. However, when the entry level of the control group was compared with their suicidal ideation level after experiment, there was no significant difference in their suicidal ideation. Also, in the relative effectiveness of the counselling media, results revealed that those exposed to face-to-face, online and blended counselling media had lesser suicidal ideation than those in control group, while none of the three counselling modes was found to be better than another as the p values for their comparisons were greater than 0.05 threshold. Many past researches are in line with the findings of this current study. For instance, Méndez-Bustos, Calati, Rubio-Ramírez, Olié, Courtet and Lopez-Castroman (2019) found that face-to-face CBT was significant in reducing suicidal ideation and attempt. Flynn, Kells, Joyce, Corcoran, Gillespie and Suarez (2017) also

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found a significant reduction in suicidal ideation as a result of the face-to-face psychotherapy. Studies suggesting face-to-face counselling ineffectiveness were not found. In addition, many studies and experiments with regard to online counselling and suicidal ideation were found to be significant. For instance, Van Spijker, van Straten and Kerkhof (2014) revealed that online counselling significantly reduced suicidal ideation among their respondents. Also, Greidanus and Everall (2010) study among adolescents using online counselling medium, showed that online counselling significantly reduces suicidal ideation and attempt among the respondents. Also, Mokkenstorm, Eikelenboom, Huisman, Wiebenga, Gilissen, Kerkhof and Smit (2016) conducted a study on the effectiveness of online suicide prevention among adolescents, the result showed that most participants in the online platforms showed significant reduction in suicidal ideations and attempts after interactions online. Also, most past studies on the effectiveness of blended counselling mode in treating suicidal ideation and attempt were in support of this present study. For instance, the findings of Seith (2013) among patients with depression and suicidal ideation using blended counselling approach found the approach to be significantly effective in reducing depression and suicide. Also, the findings of Rasing, *et al* (2021) among adolescents experiencing suicidal thoughts, depression etc. found that blended counselling approach led to significant reduction of depression among the respondents. Many other studies supported this claim (Lokkerbol, Geomini, Van Voorthuijsen, Van Straten, Tiemens, Smit, & Hiligsmann, 2018; Kobak, Mundt, & Kennard, 2015)

Results also showed the moderating influence of students' self-concept on the three counselling media. Result showed that self-concept has significant moderating influence on the three counselling media, implying that students' self-concept moderate on their level of suicidal ideation in the counselling relationships. Results further revealed that the moderating effects of self-concept on the students exposed to face-to-face, online and blended counselling media were better than those in control group. This finding is supported by that of Brooks, Madubata, Jewell, Ortiz, and Walker (2021) which was conducted among young adults experiencing suicidal ideation. Participants' self-concept was found to moderate suicidal ideation among the respondents, with those possessing high self-concept reporting lower suicidal ideation level, while those with low self-concept reported high suicidal ideation. Also, in a study conducted by O'Neill (2017), respondents' concept of self was found to significantly moderate on their suicidal ideation. The study found that those with negative

concept of themselves had higher risk to suicidal ideation, while respondents who had positive self-concept had lower suicidal ideation after counselling and experiment. Other findings have also been found to support the findings of this current study (Dat, Mitsui, Asakura, Watanabe, Takanobu, Fujii, Toyoshima, Kako & Kusumi, 2021; Teismann & Brailovskaia, 2019). However, the findings of Au, Lau and Lee (2009) conducted among adolescents negate this finding as the moderating effect of self-concept in the treatment of suicidal ideation and other depressive symptoms were found to be less obvious. Plausible reason while students' self-concept moderated on the counselling modes in treating suicide may be due to the fact that self-concept of individuals is developed during counselling, even if the counselling is not directly channeled towards building clients' self-concept and for a successful counselling relationship to be built, the self-concept of the clients must be built and positive (Barongo & Nyamwange, 2013).

Results finally revealed the moderating influence of peer relationship on face-to-face, online and blended media of counselling. The results revealed that students' peer-relationship had no significant moderating influence on the three counselling media. This is consistent with the findings of Lloyd (2014) who in her research found that peer relationship in terms of co-rumination had not moderating effects on suicidal ideation and depressive symptoms among adolescents. However, several other findings also negate this finding. For instance, researches conducted have found peer relationship to have significant moderating effects on suicidal ideation (Cui, Cheng, Xu, Chen & Wang, 2010; Heilbron & Prinstein, 2010). Reason for this result may be due to the fact that the concept of peer relationship may not really have significant impact on clients' relationships in counselling and psychotherapy sessions. This is because the experiment and counselling sessions in this present study were done on a personal and individual basis. Thus, their interactions with peers may not really factor in, in their relationships and interactions with counsellors during the counselling sessions (Mudis & Onyango, 2015).

CONCLUSION

It is concluded that there is low level prevalence of suicidal ideation among the Undergraduate students of Obafemi Awolowo University, Ile-Ife, Nigeria. Face-to-face counselling, online counselling and blended counselling are found to be effective media of counselling in addressing suicidal ideation, with the blended counselling being the best approach to address the social problem.

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