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Reduction of Suicide Ideation by the use of Cognitive Behavioural Therapy and Individual Psychology among Undergraduate Students of University of Cape Coast, Ghana.

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Abstract

Purpose: The purpose of the study was to find out the use of Cognitive Behavioural Therapy (CBT) Individual Psychology (IP) in the reduction of suicide ideation among undergraduate students in the University of Cape Coast.

Methodology: It was a quantitative study using the quasi-experimental research design, specifically, the pre-test, post-test and control group design. A total of 30 undergraduate students from four colleges of the University of Cape Coast in the Central Region of Ghana were non- randomly assigned to two treatment groups (CBT and IP) and one control group. Beck Scale for Suicide Ideation was used for the collection of data for the study. Both the descriptive (frequency and percentage) and inferential (dependent samples t-test and independent samples t-test) statistics were used to analyse the data at the alpha level of .05.

Findings: The study revealed that CBT and IP are effective in reducing suicide ideation among undergraduate students at University Cape Coast.

Unique Contribution to Theory, Policy and Practice: It was recommended that screening for suicide ideation among students be carried out on a regular basis organised by the Counselling Centre. This is with the intention of helping to educate them and creating more awareness on suicide ideation among students thereby bringing in more people per the screening to benefit from the therapies.

Keywords: *Cognitive Behavioural Therapy, Counselling, Individual Psychology, Suicide Ideation, Suicide, Undergraduate Students.*

Introduction

A few years back in 2000 we saw suicide dominating newspaper headlines, television stations and the media in general. This caused fear and panic with some calling for national prayers to exorcise Ghana from any evil.

Some years down the line, 2018 the situation has not become any better but rather it has grown worse. Suicide is a worldwide public health concern and a leading cause of preventable deaths. The Center for Disease Control and Prevention (CDC, 2012) in the United States of America estimated that young adults between the ages of 15 and 24 years attempted suicide approximately 100 to 200 times for every completed suicide. Understanding the origins of suicide ideation and identifying high risk populations is critical in the pursuit of suicide prevention. Awareness of risk factors that decrease suicidal behaviour and protective factors that increase resilience and coping skills are essential components of suicide prevention. Suicidality or suicidal behaviour exists along a continuum that extends from suicide ideation or thoughts, through suicide related communications, suicide attempts and finally suicide (CDC, 2012).

Cognitive Behaviour Therapy (CBT) helps individuals understand the thoughts and feelings that influence behaviours. Individuals learn how to recognize and change self-destructive thought patterns that negatively affect behaviour. CBT aims to teach an individual that although one may not control what happens in his/her environment, one can control how she/he interprets and responds to situations. As a treatment strategy for suicidal behaviour, CBT assists in recognizing, challenging, and changing unhealthy thoughts, as well as observing those thoughts without believing or acting on them. Based on this negative thinking pattern of suicide thoughts or ideation which may result in suicide attempt, suicide and other self-injurious behaviours, CBT encourages individuals to recognize inaccurate, unpleasant, unhealthy and negative thinking and to view challenging situations more clearly. Hence, CBT can help individuals with suicide thoughts or suicide ideation to get rid of those suicide thoughts and replace with a more positive and pleasant thoughts.

The Adlerian Therapy, more popularly known as Individual Psychology (IP) was developed by Adler. It proposes that individuals face challenges in life, which he divided into the following three areas: work (establishing a socially useful occupation or profession), friendship (creating relationships with others), and love (realizing one's role in love, marriage, and family). Current theories indicate an increase in suicidal behaviour when individuals experience a negative change in the three tasks of life. In relation to the interpersonal theory of suicide, perceived burdensomeness may result from retirement, chronic illness, and failing health. Low belongingness may be exacerbated by the death of a loved one, social isolation, and loneliness (Carlson & Maniacci, 2012).

Suicide is a global public health concern causing several deaths each year (WHO 2007). One of the rising issues is about intervention and efficacy of existing intervention. Some interventions have proven to efficacious according to Linehan et al., (2006). However, the

application and evidence supporting these guidelines for psychotherapy desire much to improve its outcomes (Rihmer 2007; Twenge et al., 2018)

Suicidal thoughts also known as suicide ideation are thoughts about how to kill one self which can range from a detailed plan to a quick consideration and does not include the final act of killing oneself. The CDC, (2012) defines suicide ideation as thinking about, considering, or planning for suicide. Robinson et al., (2013) define suicide ideation as having thoughts of engaging in behaviour intended to end one's life. A survey in research by Logan, Crosby and Hamburger (2011) supported the findings by CDC (2012) that, nearly a fifth of the adolescent population had considered suicide in the previous year. Consequently, identifying adolescents at risk is an important goal of suicide prevention programs. For students, the college or university is their community for a significant portion of the year. Colleges are a diverse group, including traditional, commuter, older, international and veterans. Students with a history of suicide ideation have shown an increase in the use of tobacco, alcohol and illegal drugs. Students with a history of suicide ideation are more likely to engage in injury-related risk behaviours, like driving intoxicated, riding with someone who is driving intoxicated, swimming or boarding after drinking alcohol, engaging in a physical fight, carrying a weapon and failing to wear seatbelts regularly, if at all (Suicide Prevention Resource Centre, 2004).

Suicide is a leading cause of death among college-aged students in the United States. It is estimated a campus of 10,000 students will see a student suicide every 2-3 years

the American College Health Association (2012) indicates in 2011 more than 6 percent of students admit to seriously thinking about suicide with 1.1 percent having made an attempt. This implied that, suicide ideation is a prerequisite for attempting suicide (WHO, 2007, 2014; Husky et al. 2012). The World Health Organization (WHO) stated that by the year 2023, 1.5 million people will kill themselves annually worldwide and this actually starts with suicide eation. The sheer numbers make suicide and suicidal behaviour a top health issue. The WHO has, in fact, made suicide prevention, along with public prevention of malaria and tobacco related diseases, the top priorities

Unlike the developing countries, the developed world has carried out lots of researches on suicide ideation (Arria et al. 2011; Husky et al. 2012; Logan et al. 2011; Jordan, 2008). Such researches have provided the developed world with information that can be used to provide assistance to those who are prone to suicidality. Ghana, a developing country is known to have few in terms of a data bank where information on suicide ideation and suicidality among university students may be obtained (Oppong Asante et al., 2017). It was therefore imperative to conduct researches on suicide ideation especially among university students. Some researchers on suicidality focused on; The Rising Cases of Suicide in Ghana; Adolescent Suicide in Ghana; Suicide and Culture; and Developing Suicide Prevention and Research in Ghana (Osafo, 2011; Osafo, Hjelmeland, Knizek, & Akotia, 2012; Osafo, Knizek, Akotia, & Hjelmeland, 2013; Oti, 2014; Pupulampu, 2015). But in all the above, none of them used and tested these psychological theories – Cognitive Behavioural Therapy (CBT) and Individual Psychology (IP) to ascertain their efficacy in reducing suicide ideation among undergraduate

university students. It was based on these research gabs that the researcher decided to test the efficacy of CBT and IP in reducing suicide ideation among undergraduate students of the University of Cape Coast by using the quasi-experimental design. Also, a search through the various counselling centers of the University of Cape Coast including the hospital, 45 cases of attempted suicides were recorded within a span of three years (2015 – 2018).

The purpose of the study was to test the reduction of suicide ideation among suicidal undergraduate students of the University of Cape Coast using Cognitive Behavioural Therapy (CBT) and Individual Psychology (IP) as intervention strategies.

In view of the above, the current research focused on testing the following hypothesis in order to guide the conduct of the study:

H_0 1: There is no significant difference in the reduction of suicide ideation between regular undergraduate students in pre-test and post-test groups with respect to Cognitive Behavioural Therapy (CBT).

H_A 1: There is a significant difference in the reduction of suicide ideation between regular undergraduate students in pre-test and post-test groups with respect to Cognitive Behavioural Therapy (CBT).

H_0 2: There is no significant difference in the reduction of suicide ideation between regular undergraduate students in pre-test and post-test groups with respect to Individual Psychology (IP)

H_A 2: There is a significant difference in the reduction of suicide ideation between regular undergraduate students in pre-test and post-test groups with respect to Individual Psychology (IP)

Methodology

The research paradigm used for this study was positivism. Positivism is a philosophical approach based on experience and empirical knowledge of natural phenomena. Positivism represents a view that the goal of knowledge is to provide a depiction of the situation people have been through and the purpose of science which can be observed and measured (Trochim, 2006). Positivists believe that reality is out there and can be tested. Positivists prefer to use quantitative data for their research and often conduct experiments, surveys and use statistics. They test hypotheses by carefully analysing numbers from the measures they employ. Thus, they depend mainly on figures and numbers that have been scrutinized and critiqued. This philosophy was applicable to this study since it aided the researcher to test the use of the two therapies, CBT and IP, in reducing suicide ideation among undergraduate students of the University of Cape Coast.

The research approach adopted for the study was quantitative approach. The goal in conducting quantitative research study is to determine the relationship between one thing (an independent variable) and another (a dependent or outcome variable) within a population (Babbie, 2010).

The study employed the quasi-experimental design with the pre-test and post-test which helped to establish the use of CBT and IP in reducing suicide ideation.

Beck's Scale for Suicide Ideation was used to collect the data with internal consistency of 0.89. Since this was the inventory used to collect both the pre-test and post-test data, the inherent validity of .89 was adjudged suitable as indicated by Pallant (2005). Beck Scale for Suicide Ideation was adopted for use in measuring the suicide ideation of undergraduate students of the University of Cape Coast. It is a 19-item instrument that evaluates the presence and intensity of suicidal thoughts. The Beck's Scale for Suicidal Ideation (BSSI) was designed to quantify the intensity of current conscious suicidal intent by scaling various dimensions of self-destructive thoughts or wishes. The items assessed the extent of suicidal thoughts and their characteristics as well as the respondent's attitude towards them; the extent of the wish to die, the desire to make an actual suicide attempt and details of plans, (if any). Per the manual for scoring for Beck's Scale for Suicide Ideation, each item consists of three alternative statements graded in intensity from 0 to 2. The instrument's total score is the sum of the individual item scores and may range from 0 (low ideation) to 38 (high ideation). In other words, a positive rating (>1) on any of the ideation scale's 19 items is considered as a potential indicator of suicide ideation. A score ranging from 0 to 19, indicates a low ideation while a score from 20 to 38 also indicates high ideation.

Population

The total number of regular undergraduate students of the University of Cape Coast is 18,699. This includes students in four colleges of the University, viz: College of Humanities and Legal Studies, College of Health and Allied Sciences, College of Education Studies and College of Agriculture and Natural Sciences. The target population was undergraduate students from the four colleges of the University of Cape Coast and the accessible population was those who answered the screening inventory.

The multi-stage sampling technique was employed for selecting the sample for the study. In the first stage, the purposive sampling was used to select the University of Cape Coast for the study. From the five colleges in which undergraduate students are enrolled in the University, the researchers purposively selected four of the five colleges of regular undergraduate students leaving out the undergraduate students of CODE, the fifth College, whose students do not stay on campus but are scattered nationwide, making access to them extremely difficult or impossible. From the remaining four colleges, one faculty each was purposively selected. Also, using purposive sampling method, one department was chosen from each faculty. The targeted students from each of the departments were subjected to the screening of the Beck's Scale of Suicide Ideation. A non-random criterion was then used to select 30 respondents, which means not every individual had the chance of being included in the study, from the various colleges based on the students that responded to the items on the Beck's Scale for Suicide Ideation. A non-random criterion was then used to select 30 respondents from the various colleges based on the students that responded to the items on the Beck's Scale for Suicide Ideation. The total sample size was 30.

The inclusion criteria were as follows:

1. The student should be an undergraduate regular student of the University of Cape Coast.

2. The student could be at any level in his / her study.

3. The student could be of either gender.

4. The student should undergo screening to obtain a total score ranging from 19-38 to qualify for the intervention.

The distribution of the respondents is presented in Table 1.

Table 1: Distribution of the Population and Sample

College	Male	Female	Total	Sample
College of Agriculture and Natural Sciences	2806	835	3641	8
College of Education Studies	2985	2196	5181	8
College of Health and Allied Sciences	1478	1103	2581	8
College of Humanities and Legal Studies	4199	3097	7296	6
Total	11486	7231	18699	30

For the data collection to be done in an ethically sound manner, an introductory letter was taken from the Department of Guidance and Counselling which helped the researchers introduce themselves to the undergraduate students of University of Cape Coast and explain the purpose of the study to them. This gave us access to some students who went through the various treatments for the study.

For the sessions, the groups met to agree on the time for the meeting so as to avoid disruption of the participants regular lecture times and campus activities since they were all students. They met twice in a week for an hour each for the eight weeks intervention. Mondays and Thursdays were scheduled for meeting days at 6:45pm – 7:40pm at an agreed venue. Since all participants were presents to decide on the time schedule, their participation in the sessions was good. Per the focus, Siegel, Carter and Thase (2006) proposed a 16-session therapy as adequate to achieve this focus and that informed the researcher to plan the 8 weeks intervention schedule to help reduce suicide ideation among participants. The assistants used both the question-and-answer method as well as the discussion method of teaching to enhance the interest of participants and also to ensure they contribute effectively to make each session a good one.

The focus of the intervention sessions was on teaching and helping participants on the techniques and strategies of CBT and IP and how these strategies can help them to reduce suicide ideation. Thought Stopping, Cognitive Rehearsal and Thought Recording were the techniques used in the CBT group. For the IP group, the techniques used were Push Button, Encouragement and Paradoxical Intention. They were given homework after each session, which enabled them to practise what they were taught at each session and bring feedback to the next meeting day.

Data from the field were cleaned, coded appropriately to make meaning out of them. Coding was done to facilitate data entering and analysis. With the aid of Statistical Package for Social Sciences (SPSS 25), descriptive statistics such as frequencies, percentages were used to analyse the data.

Results

Cognitive Behavioural Therapy (CBT) Results

At an alpha level of 0.05 confidence, hypothesis one was tested to find out whether any significant difference exists in the reduction of suicide ideation between undergraduate regular students in pre-test group and those in the post- test group. To assess difference in undergraduate students in pre-test and post-test groups (i.e., Cognitive Behavioural Therapy), dependent samples *t*-test (paired samples *t*-test) was deemed appropriate for the study. To obtain the scores for the analysis, the responses on the undergraduate students in pre-test and post- test were transformed into a single variable using the SPSS Software, Version. 25.

The data on scale or inventory were made up of pre-test and post-test variable which were measured on a continuous scale (interval). The dependent samples *t*-test (paired samples *t*-test) was conducted to determine or assess whether the mean scores from two experimental conditions are statistically different from one another. In using the dependent samples *t*-test, the assumptions are that, the dependent variable (difference scores) is normally distributed in the two conditions. The independent variable is dichotomous and its levels (groups or occasions) are paired, or matched, in some way (e.g., pre-test and post-test.). Before performing the dependent samples *t*-test, the normality assumption was tested.

Normality Test

Table 2: Normality Test Results of the Variables

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Pre-test	.315	10	.069*	.577	10	.000
Post-test	.190	10	.200*	.944	10	.036

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Source: Field Survey (2020).   * Normality exists at p≤0.05

In Table 2, Kolmogorov-Smirnov[a] test results are reported based on the assumption that it uses a sample size less than 50 (n<50). Kolmogorov-Smirnov[a] test results are said to be normal if the sig value is greater than 0.05. From the Kolmogorov-Smirnov[a] test results, it is indicated that the dependent variables were normally distributed. For example, pre-test results scored a Kolmogorov-Smirnov[a] indicating that the data were normal *(KS = .315, df=10, p-value=.069**, p>0.05),* post-test also recorded a Kolmogorov-Smirnov[a] results indicating that it was normal *(KS = .190, df=10, p-value=.200**, p>0.05, n=10).* Figure 1 also presents the results of the normality assumption.
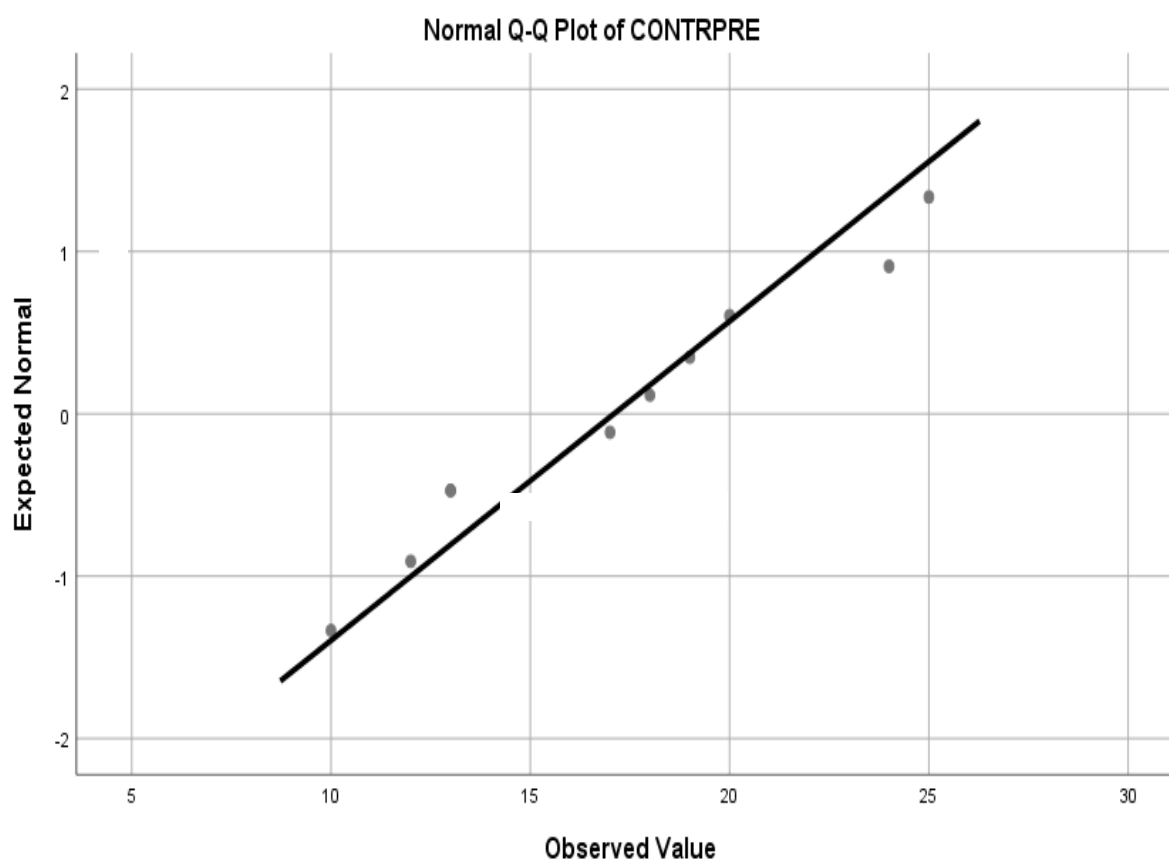

Figure 1: Linear Assumption

Source: Field Data (2020).

Figure 1, which shows that the movement of the variable along the diagonal line indicates that the data were assumed normal and as such dependent samples *t*-test could be performed. Table 2 presents the means, standard deviation and the *t*-test between the variables for hypothesis one. Having tested for the normality of the data, the researcher proceeded to test

the difference in the reduction of suicide ideation between undergraduate students in pre-test and post-test groups using Cognitive Behavioural Therapy. This therefore, means that conducting dependent samples *t*-test was justified and statistically reasonable.
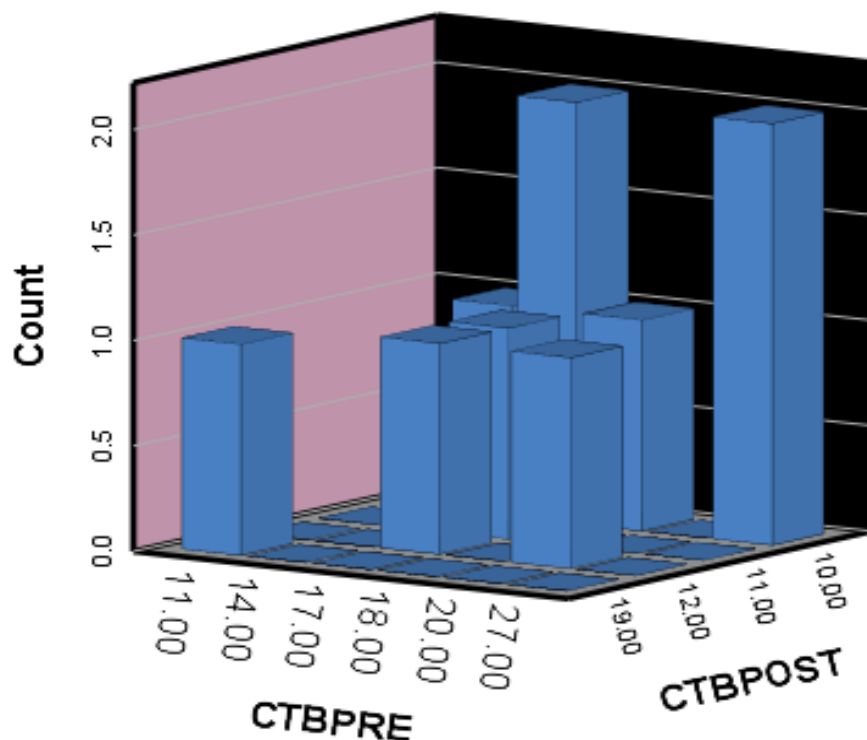

Figure 2: Homoscedasticity Normality Assumption for Cognitive Behavioural Therapy (CBT)

Source: Field Data (2020).

Figure 2 show that the results on Cognitive Behavioural Therapy (CBT) using pre and post-test of undergraduate students' suicide ideation. The results show that the cluttering of the bars show that the data was assumed normal and as such dependent samples *t*-test could be performed. Table 3 presents the dependent samples *t*-test of the variables.

Table 3: Results of Dependent Samples *t*-test

	Status	Mean	SD	Cal. t-value	Df	P-value	Eta^2-value	Decision
CBT	Pre-test	17.10	5.087	-3.081*	09	.013(s)	0.78	Sig.(p<.05) (rejected)
	Post-test	11.40	2.796					

Source: Field data, 2020.   *Significant, $p \leq 0.05$

From the analysis results in Table 3, there are significant differences with respect to pre-test and post-test data. The pre-test recorded a result of $M = 17.10$, $SD = 5.087$ and post-test as $M = 11.40$, $SD = 2.796$ both with a cal. t-value of t (df=09) =-3.081; $p < .05$, 2-tailed). The magnitude of the differences in the means was considerable with an Eta^2-value of 0.78. This implies that the use of Cognitive Behavioural Therapy was very effective in reducing suicide ideation among regular undergraduate students with suicide ideation.

Individual Psychology (IP) Results

Again, at an alpha level of .05 confidence, hypothesis two was tested to find out whether any significant difference exists in the reduction of suicide ideation between undergraduate students in pre-test and post-test groups using Individual Psychology. To assess the differences, dependent samples t-test (paired samples t-test) was deemed suitable for the study based on its assumptions. The assumptions satisfy that the dependent samples t-test (paired samples t-test) is conducted to determine or assess whether the mean scores from two experimental conditions are statistically different from one another. In using the dependent samples t-test (paired samples t-test), the researcher wanted to establish whether, the dependent variable (difference scores) is normally distributed in the two conditions (pre-test and post-test). To attain the scores for the analysis, the responses on the undergraduate students in pre-test and post-tests were transformed into a single variable using the SPSS Software, Version. 25.

The data on scale or inventory were made up of pre-test and post-test variable which were measured on a continuous scale (interval). The independent variable is dichotomous and its levels (groups or occasions) are paired, or matched, in some way (e.g., pre-test and post-test.). Before performing the dependent samples t-test, the normality assumption was tested.

Normality Test

Table 4: Normality Test Results of the Variables

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Pre-test	.190	10	.200[*]	.944	10	.603
Post-test	.358	10	.301	.713	10	.001

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Source: Field Survey (2020).　　　　　　　　* Normality exist at p≤0.05

As depicted in Table 4, Kolmogorov-Smirnov[a] test results are stated based on the assumption that it uses a sample size less than 50 (n <50). The sample was less than 50 therefore, the Kolmogorov-Smirnov[a] was reported. From the Kolmogorov-Smirnov[a] test, the results are said to be normal if the sig value is greater than 0.05. From the Kolmogorov-Smirnov[a] test results, it is indicated that the dependent variables were normally distributed. For example, pre-test results scored a Kolmogorov-Smirnov[a] indicating that the data were normal *(KS = .190, df =10, p-value=.200**, p>0.05),* post-test also recorded a Kolmogorov-Smirnov[a] results indicating that it was normal *(KS = .358, df=10, p-value=.301**, p>0.05, n=10).* Figure 3 also presents the results of the normality assumption
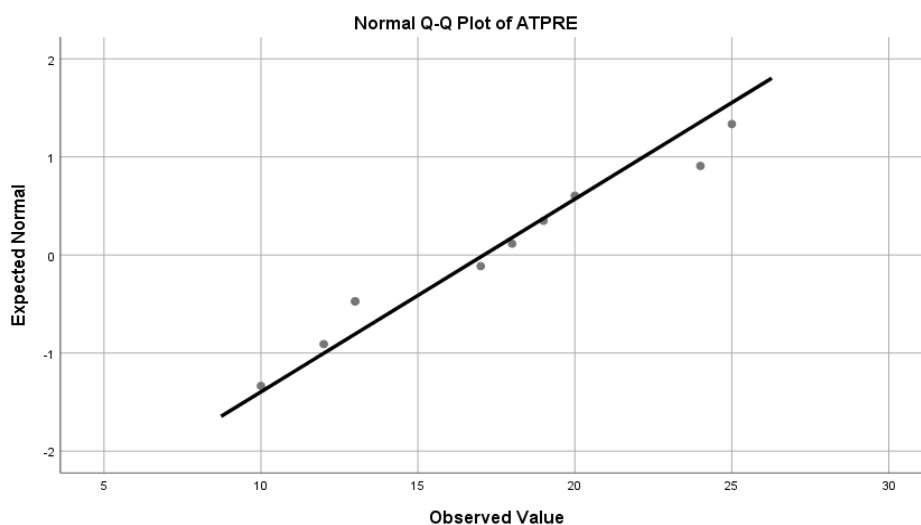

Figure 3: Linear Assumption

Source: Field Data (2020).

Figure 3, which shows that the movement of the variable along the diagonal line indicates that the data were assumed normal and as such dependent samples *t*-test could be performed. This therefore, means that conducting dependent samples *t*-test was justified and statistically reasonable
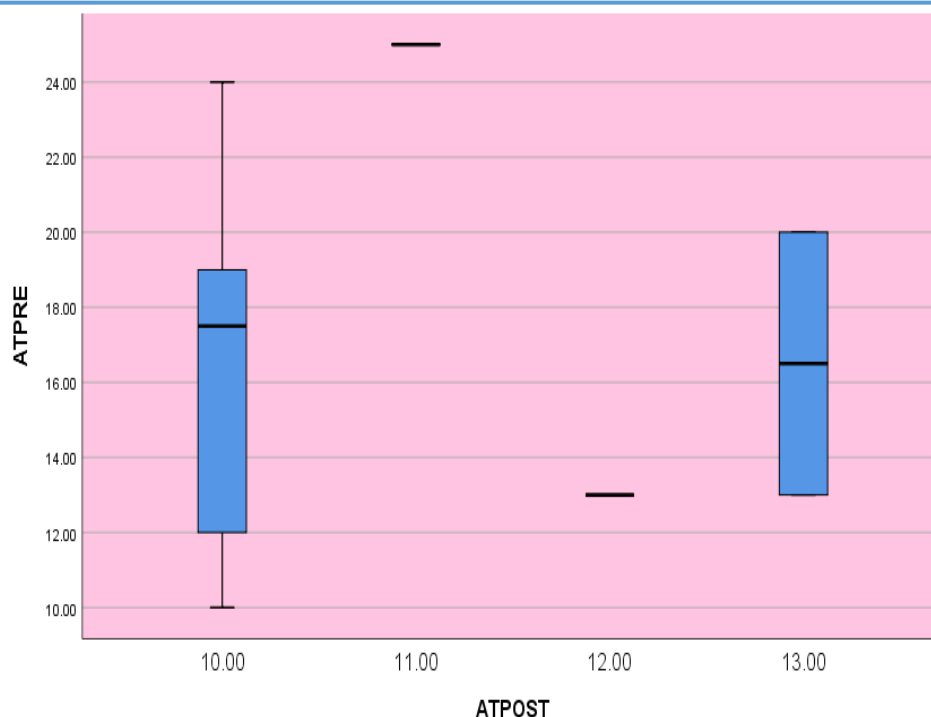
Figure 4*:* Homoscedasticity Normality Assumption

Source: Field Data (2020).

Figure 4 shows that the mean plot of standardised predicted indicates that the data were assumed normal and as such dependent samples *t*-test could be performed**.** Having tested for the normality of the data, the researcher proceeded to test the difference in the reduction of suicide ideation between undergraduate students in pre-test and post-test groups using Individual Psychology therapy. Table 5 presents the means, standard deviation and the dependent samples *t*-test between the variables for hypothesis two.

Table 5: Results of Dependent Samples *t*-test

VariableStatus		Mean	SD	Cal. t-value	Df	P-value	Eta^2-value	Decision
IP	Pre-test	17.11	5.87	3.679*	09	.0005(s)	0.56	Sig.(p<.05)
	Post-test	10.90	1.28					(rejected)

Source: Field data, 2020.   *Significant, $p \leq 0.05$

From the analysis results in Table 5, which show significant differences with respect to pre-test and post-test results in using Individual Psychology (IP). The pre-test recorded a result of $M = 17.11$, $SD = 5.87$ and post-test recorded as $M= 10.90$, $SD = 1.28$ both with a cal. t-value of t (df=09) =3.679; $p < .05$, 2-tailed). From the results, the differences are estimated to have

Eta^2-value of 0.56. This implies that the use of Individual Psychology was very effective in reducing suicide ideation among regular undergraduate students with suicide ideation.

Discussion

The use of CBT

Cognitive Behavioural Therapy (CBT) helps individuals understand the thoughts and feelings that influence behaviours. Individuals learn how to recognize and change self-destructive thought patterns that negatively affect behaviour. CBT aims to teach an individual that although one may not control what happens in his/her environment, one can control how she/he interprets and responds to situations. As a treatment strategy for suicide ideation and suicidal behaviour, CBT assists in recognizing, challenging, and changing unhealthy thoughts, as well as observing those thoughts without believing or acting on them.

From the experimental sessions, one of the techniques used was thought stopping, also known as thought blocking. It is technique in CBT which helps people to deal with negative thought cycles and constant worrying. The basis of this technique is that once a negative thought arises, the clients should consciously issue a command for the thought to stop. The idea is to replace a negative thought with a more balanced and positive one. It acts as interaction to the negative thoughts, interrupting obsessive negative thought (Smith, 2018). Participants were therefore able to follow what they were taught and even practiced them for the homework sessions. The feedback they brought helped us to further explain or buttress a point. Comparing the pre-test and the post- test results; pre-test $M = 17.10$, $SD = 5.087$ and post-test $M= 11.40$, $SD = 2.796$, it was evidenced that the use of CBT in helping reduce suicide ideation among undergraduate students in the University of Cape Coast was very effective. In other words, the use of CBT helped to reduce suicide ideation. The results from using CBT are supported by Alavi, Sharifi, Ghanizadeh, and Dehbozorgi (2013), they found that "CBT was effective in decreasing hopelessness and depression" and "that CBT is an effective, appropriate, and acceptable treatment modality for the adolescents with recent suicidal attempts and current suicidal ideas" (p. 471). Pratt (2016) also asserted that CBT helps reduce disorders and improves quality of life.

The use of IP

Form the results so far, CBT has proved very effective in reducing suicide ideation among undergraduate students of the University of Cape Coast. Individual Psychology aims at talking about, examining and gaining insights into difficulties faced by individuals, couples and families. The focus is on the feelings of inferiority versus superiority, discouragement and sense of belonging to one's community and society at large. In this therapy for example, the feelings of inferiority can result in neurotic behaviour but can also be used as a motivation to strive for greater success in the right setting (Watts & Pietrzak, 2000).

An Individual Psychology therapist would be supportive, respectful, and encouraging in her/his attempt to determine what is motivating an individual's behaviour when confronted by life's problems. The therapist would confront her/his private logic to assist in ferreting out both the

vaguely conscious and unconscious goals. College is a time when social networks become increasingly important and complex as students are oftentimes moving away from home and living on their own for the first time. For some students, being of college student status may protect against suicide ideation and its related issues due to students being more socially connected than they were prior to college (Hazel, Nowlin & Reinecke, 2011).

Some of the techniques used during the experimental session included encouragement, push button and paradoxical intension. According Watts, (2014) encouragement helps clients recognise their worth. This technique seeks to reorient clients by stimulating the clients' courage to change. Students were also assisted in generating perpetual alternatives for discouraging fictional beliefs. In Individual Psychology Therapy, therapist see their clients as discouraged and lack the confidence and the courage to engage successfully in the problems of life. And without encouragement, without having faith restored in oneself, one cannot see the possibility of functioning better (Watts & Pietrzak, 2000).

Students were made to understand their situations, with the help of the homework which included listening to motivational tapes on how people failed in life at a point and they did not give up by committing suicide but were able to rise up to the task and make it in life. The feedback they brought was encouraging and we saw progress in every bit of their movement. It is therefore evidenced in comparing the pre-test and the post-test, results of pre-test M = 17.11, SD = 5.87 and results of post-test M= 10.90, SD = 1.28, that Individual Psychology was very effective in helping reduce suicide ideation among undergraduate students of the University of Cape Coast.

Conclusion

Based on the findings of the study, the researchers concluded that;

1. CBT and IP are efficacious in reducing suicide ideation. In other words, students who went through the treatment sessions with the above therapies saw or experienced reduction in suicide ideation.
2. Counsellors and Social workers should be encouraged to use either of the therapies, CBT and IP, to help students reduce suicide ideation since the study has proved its efficacy.

Recommendation

1. Counselling Day Out should be organized regularly by the Counselling Centre and the Department of Guidance and Counselling in the various halls and hostels, department and faculties, to educate and create awareness on suicide ideation and how students can be helped out using therapies.
2. The findings of the study can be shared with the appropriate authorities such as the University management and Counsellors at the Counselling Centre and other Counselling Agencies to assure them that CBT and IP can be used to reduce suicide ideation.

3. The findings may help Individual and government agencies in the development and establishment of suicide ideation and suicidality intervention programs in counselling, mental health and public health policies.

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