Therapeutic Effects of Logotherapy and Motivational Interviewing on Depressive Symptoms among Inmates of a Correctional Facility in Nigeria

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Abstract

This study examined the therapeutic effects of Logotherapy and Motivational interviewing on depressive symptoms among inmates of a correctional facility in Anambra State, Nigeria. Twenty nine (29) male inmates of the facility, who scored above 49 on a Self – rating depression scale, whose ages ranged from 22 to 70 years, with a mean age of 37.10 years and standard deviation of 11.10 were selected for the study. The participants were grouped into three; two experimental groups (Logotherapy and Motivational Interviewing) and one control group through simple random sampling technique. The therapy session lasted for 5 weeks; two sessions per week, 60 minutes per session. The participants were assessed with the Self- rating depression scale developed by Zung (1965), before and after the treatment. The study adopted a pre- test and post- test between subject design and the results were analyzed using Analysis of Covariance statistics. At p <. 05, the first and second hypotheses were accepted, with F (2, 29) = 19.92, p = .00. Thus, participants who received Logotherapy and Motivational interviewing showed significant remission in depressive symptoms when compared to control group. Also, at p <.05, the third hypothesis was rejected, as participants who received Logotherapy did not show significant reduction in depressive symptoms compared to those who received Motivational interviewing. Indeed, neither of the two therapies was significantly more efficient than the other in the management of depressive symptoms. Based on the findings, the researcher therefore recommended that Logotherapy and Motivational

interviewing be employed in psychological treatment of depression across different mental health settings.
Key words: *Therapeutic Effects, Logotherapy, Motivational Interviewing, Depressive Symptoms, Inmates, Correctional Facility.*

Background to the Study

In one of our casual visits to a correctional facility in Anambra State, it was observed that most of the inmates showed some signs of depression. Some of them on interrogation reported that their world have crashed. They complained of being hopeless, sad, and worthless and that they often think of being better dead than alive. As a psychologist in the making, it occurred to me that these are known symptoms of depression as contained in the DSM -V. Also, the solitary nature of correctional facilities has potentials to cause depression. Depression is now a global menace that threatens everyone and it is one of the leading causes of death worldwide (Walker *et al*., 2015). It affects an estimated one in 15 adults (6.7%) in any given year and one in six people (16.6%) will experience depression at some time in their life (American Psychiatric Association, 2021). Depression is a common mental disorder affecting more than 264 million people worldwide and it is a leading cause of disability around the world and contributes greatly to the global burden of disease (Ferrari *et al.*, 2013; World Health Organization, 2021). Africa as part of the globe is not immuned to the devastating effects of depression and it is said that rates of depression across the African continent are higher than those found in Europe or the United States (Ferrari, *et al*, 2013). The poor living condition and the precarious nature of things in Africa could be the possible reason for a higher prevalence in Africa. The same attribution and conclusion may be made about correctional facilities in Africa and in Nigeria in particular. Depression is the most common form of mental disorder among inmates, with a prevalence much higher than in the general population (Shrestha *et al.*, 2017).

Imprisonment, notwithstanding the factor that led to it is a significant stressful event in the life of every person. Incarceration being a form of punishment produces significant changes in an individual's physical, psychological and social life (Majekodunmi *et al.*, 2017). Regardless of our ability as humans to manage and adjust, stressful incidents may change a person's entire balance to such an extent that the memory of a particular negative event overshadows all other experiences and affects the ability to deal with life. In the prison, however, basic human values are distorted, contributing to temporary or even irreversible psychological sequelae (Majekodunmi *et al.*, 2017). Indeed, depression may be one of these psychological sequelae.

American Psychiatric Association (2021) defined depression as a common and serious medical illness that negatively affects how you feel, the way you think and how you act, which causes feelings of sadness and/or a loss of

interest in activities you once enjoyed. It can lead to a variety of emotional and physical problems and can decrease your ability to function at work and at home. The word depression is used to describe a range of moods – from low spirits to a severe problem that interferes with everyday life (Borrill, 2000).

Depression is when normal feelings like being sad, down, grumpy, or irritable are very intense, go on for too long and get in the way of normal life. Depressed feelings happen to everyone sometimes, especially after a loss or disappointment. When they happen too much and interfere with life—get in the way of doing things you want to do and need to do—is when it is important to get help. Depression can be a specific episode or repeated episodes that are out of the ordinary for the person. The episode can be mild, moderate or severe. Severe depressions usually involve suicidal thoughts or behaviours. In some cases, depression can be chronic. Depression is not caused by any one thing but it usually happens because of a combination of things. It can be caused by stress, chronic illness, or chemicals in the brain (not working like they should). Stressful life events like the death of a loved one, a divorce, a move to a new area, or a breakup with a girlfriend or boyfriend can bring on depressive feelings (Trails, 2019). Certain times of life when there are many changes, like entering the teenage years, can be especially stressful and lead to depression. Sometimes, depression can seem to come out of the blue. Depression sometimes runs in families, so someone with a close relative who has depression may be more likely to experience depression (Kam, 2009).

Depression causes the patient to have a pessimistic view of things. It also discourages enthusiasm and stifles one's initiative. It may also produce despair and bring about sickness in the mind and body. It can make one resort to rash and thoughtless actions that a person may later regret. Much of the time such thoughts are completely unnecessary. Thus, it is imperative that we help manage depression so that people can live in happiness, ingenuity, energetic, and are thus able to reach their higher potentials in life.

People with depressed mood can feel sad, anxious, empty, hopeless, helpless, worthless, guilty, irritable, angry, ashamed or restless (Kennedy, 2008). They may lose interest in activities that were once pleasurable, experience loss of appetite or overeating, have problems concentrating, remembering details or making decisions, experience relationship difficulties and may contemplate, attempt or commit suicide. Insomnia, excessive sleeping, fatigue, aches, pains, digestive problems or reduced energy may also be present. Depressed mood is a feature of some psychiatric syndromes such as major depressive disorder (American Psychiatric Association 2013), but it may also be a normal reaction, as long as it does not persist for long term, to life events such as bereavement, a symptom of some bodily ailments or a side effect of some drugs

and medical treatments and also a stressful event.

Sequel to the prevalence of depression, there is need for treatment to forestall its havoc. Treatment and management of depression is important, as it relieves symptoms of the sufferer, and restores premorbid functioning. There are different intervention techniques that can be applied in the management and treatment of depression. The mainstay of treatment is usually medication, psychotherapy or a combination of the two. Opinions vary on how effective medications (antidepressants) are in relieving the symptoms of depression. Some people harbour suspicions that they work well, while others consider them to be very important. But, like with many other treatments, these medications may help in some situations and not in others. They are effective in moderate, severe and chronic depression, but probably not in mild cases, and they can also have side effects (Informed Health, 2020).

In view of the above, the present researcher looked for alternative methods that can be used for remission / reduction of depressive symptoms. This does not in any way suggests the fact that there were no alternative therapeutic modalities to depression management apart from medications prior to this time. So many psychological therapeutic modalities abound like cognitive behavioural therapy, rational emotive behavioural therapy, client centred therapy and the likes, but the present researcher knowing too well about the availability of other psychological treatment modalities saw the need to investigate logotherapeutic methodology and motivational interviewing in reducing depressive symptoms.

Logotherapy as a treatment method is not popular in Nigeria and motivational interviewing is a fast growing therapeutic modality, which has not been applied as such to our local therapeutic milieu. Asagba (2013), emphasizing on the scarcity of application of logotherapy in Africa and in Nigeria in particular opined that logotherapy is less utilized in Nigerian despite its brevity. Logotherapeutic treatment modality has not been used in Nigerian as such, and there is no record to the knowledge of the present researcher that it has been applied in a correctional facility in Nigeria. This will be a shift from the status quo, their cost effectiveness and the succinctness of their processes stand out as advantage, and their wider applicability is overwhelming (Asagba, 2013; Southwick, *et al.*, 2016).

Logotherapy is a term derived from “logos,” a Greek word that translates as “meaning,” and therapy, which is defined as treatment of a condition, illness, or maladjustment. Developed by Viktor Frankl, the treatment modality is founded on the belief that human nature is motivated by the search for a life purpose; logotherapy is the pursuit of that meaning for one’s life. Frankl's Logotherapy was heavily influenced by his personal experiences of suffering and loss in Nazi concentration camps. Viktor Frankl’s logotherapy has been framed as a healing through meaning

(Costello, 2015). Logotherapy aims to bring not just instinctual factors but the spiritual realities of the person to consciousness. This is a meaning centred therapy that aims to achieve attitudinal alterations through mobilising the patient's will to meaning (Costello, 2015). Logotherapy maintains that a human's principal motivation is not to search for power or gratification, but to discover the purpose of existence (Devoe, 2012). The main idea behind logotherapy is that lack of meaning is the chief source of stress as well as anxiety, and logotherapy aids the patients to reach the *meaning of life* **(**Faramarzi & Bavali, 2017). In other words, logotherapy is a type of psychotherapy that accept as true that lack of meaning causes mental health issues, so it attempts to help people find meaning in order to help solve their problems. Perera (2020), sees logotherapy as a scientifically grounded school of psychotherapy, based on the belief that the search for meaning even amidst misery can constitute a potential solution to human suffering. Some empirical works abound to buttress the fact that logotherapy has been used over the years as a treatment modality, some of such works are – the work of Sun *et al.*, (2021) on the effects of logotherapy on distress, depression and demoralization breast cancer and gynaecological cancer patients; and the work of Robatmili *et al.*, (2015) on the effect of group logotherapy on meaning in life and depression levels of Iranian students.

Another therapeutic modality of interest in this study is Motivational Interviewing (MI), and it is defined by Patterson (2021) as a psychotherapeutic approach that attempts to move an individual away from a state of indecision or uncertainty and towards *finding motivation to making positive decisions and accomplishing established goals***.** Motivational interviewing was formed 30 years ago by Miller and Rollnick (1965), as a way to push past the issue of low motivation to change. Motivational interviewing is an intervention designed for situations in which a patient needs to make a behaviour change but is ambivalent about it, sometimes to the extent of being quite hostile to the idea. Motivational interviewing **(***MI***)** *is a collaborative, goal-oriented style of communication with particular attention to the language of change. It is designed to strengthen personal motivation for and commitment to a specific goal by eliciting and exploring the person's own reasons for change within an atmosphere of acceptance and compassion* (Miller & Rollnick, 2013). The justification for the choice of Motivational interviewing is that some empirical studies have been done to ascertain the effectiveness of motivational interviewing on the treatment of depression in other milieu, but this has not been applied in Nigeria (see Ponsford, *et al.*, 2016; Lie et al., 2020).

Statement of the Problem

In Nigerian correctional facilities, most inmates were observed to show

symptoms of depression. According to World Health Organization (2020), depression is a common mental disorder, and more than 264 million people of all ages suffer from depression, and it remains a leading cause of disability worldwide and is a major contributor to the overall global burden of disease. The above assertion indicates increasing prevalence of depression globally. Worse still, is depression among the inmates of correctional facilities in Nigeria, it is said to be the most common form of mental disorder among inmates with a prevalence much higher than in the general population (Balogun & Olawoye, 2013 ;Shrestha et al., 2017; Uche & Princewill, 2016). One of the major reasons why people are sent to the correctional facilities is to improve behaviourally, but the reverse can be the case. A depressed inmate can hardly respond to any correctional programme, hence the need to tackle depression in our correctional facilities.

Pharmacological medications notwithstanding their adverse effects have been very effective in handling depressive symptoms. Some traditional psychotherapeutic modalities like CBT and REBT have been also very successful in ameliorating depression (Cherry, 2021). Some of these well-known therapeutic modalities like CBT are very costly, and are said to be most effective with educated clients. CBT has also been criticized based on the fact that it addresses current issues only instead of addressing some underlying causes. There is then the need to seek out for other psychotherapeutic modalities that can suite both the educated and non-educated and that can tackle underlying cause of depression rather than the current issues that are the effects of the underlying causes. Such other therapeutic modalities abound though with limited literature and empirical foundations. In view of the above, the current researcher has decided to seek out and experiment on those other treatment methods that can serve as alternatives to CBT and other well-known treatment modalities with the view of achieving more results. Thus within the scope of this present study, logotherapy and motivational interviewing (MI) were examined in statistical model to see the extent of their contribution in preventing or managing depression. Logotherapy has not been applied as such in African setting and in Nigeria in particular. Even from the few instances of its application in Nigeria as seen in the works of Asagba (2013, 2016), it is yet to be applied in a correctional facility in Nigeria. Motivational interviewing on its part has been applied in various settings in Nigerian but yet to be seen applied to inmates of correctional facilities. Hence, the need to use these therapeutic modalities in Nigeria, which will be a headway for other researchers and clinicians.

Research Questions

This study provided answers to the following research questions;

1. How effective will logotherapy be in the reduction of depressive symptoms among participants?
2. Is motivational interviewing an effective treatment for depressive symptoms among participants?
3. Will logotherapy be effective in reducing depressive symptoms more than motivational interviewing?

Purpose of the Study

The general purpose of this study was to explore the effects of logotherapy and motivational interviewing in reducing depressive symptoms among inmates in Nnewi correctional facility.

Specifically, the purposes were;

1) To assess the effectiveness of logotherapy in the management of depressive symptoms among inmates.
2) To examine the effectiveness of motivational interviewing in the management of depressive symptoms among inmates.
3) To compare the efficacy of logotherapy and motivational interviewing in the management of depressive symptoms.

Relevance of the Study

The findings of this study will have practical, theoretical and empirical relevance.

Practically:

1 The findings of the study would also benefit psychotherapists, clinical psychologists, and researchers in Nigeria especially those who are interested in psychotherapeutic modalities, or in treatment of depression other than the traditional treatment modalities.

2 It will also reveal how the search for meaning can be explored as a positive resource in psychotherapy.

3 It may also reveal the extent that Motivational interviewing can be utilized; not just as an adjunct therapy but as a full flesh12 therapeutic modality.

Theoretically:

1 The findings of this study will be a wakeup call to researchers in Nigeria as to the prevalence of mental illnesses especially depression among inmates of correctional facilities in Nigeria.

Empirically,

1. The findings of this study will increase available literature on both logotherapy and motivational interviewing, especially in respect to the management of depression.

Hypotheses

The following hypotheses were formulated to guide the study.

1. Logotherapy would reduce depressive symptoms among participants.
2. Motivational interviewing would reduce depressive symptoms among participants.
3. Participants treated with logotherapy would experience more symptom reduction (improvement) than the inmates

treated with motivational interviewing.

METHOD:

Participants

The participants of this study were inmates in Nnewi correctional facility, all still awaiting trial. The participants were selected through a two-stage cluster sampling method. The Nnewi Prison is made up of 6 cell blocks, these 6 blocks formed 6 clusters for population sampling. Cell A has 45 inmates, Cell B has 109 inmates, Cell C has 15, Cell D has 5, and Cell E and Cell F have 45 inmates respectively. Twenty nine (29) male inmates who scored above 49 on self-rating depression scale participated in the study. The ages of the participants ranged from 22 to 70, with mean age of 37.10 years and standard deviation of 11.10. The therapy sessions were conducted in English language and only inmates who understand the language considerably participated in the therapy.

Instrument

Self-Rating Depression Scale (SRDS)

The instrument used in this study was Self-rating Depression Scale (SRDS) by William W. K. Zung (1965). Self-rating Depression Scale (SDC) is a 20-item scale designed to assess the cognitive, affective, psychomotor, somatic and social interpersonal dimensions of depression. The SDS is a self-reporting instrument that can be completed in about 8 to 10 minutes. The inventory is rated on a 1-4 Likert response format, ranging from a little of the time to most of the time. Items contained in the scale include statements such as: I feel down-hearted and blue; I have crying spells or feel like it; I eat as much as I used to. The developer established a .71 concurrent validity coefficient. Zung (1965) categorized the severity of Depression as follows: 50-59 mild, 60-69moderate, 70-80 severe. Self-rating depression scale was validated here in Nigeria by Obiora (1995), who obtained a test-retest coefficient reliability of 0.93 with Nigerian samples. The norms for Nigeria males (n=100) = 48.77 and females (n=100) = 47.87. The norms served as the basis for the interpretation. Individuals who scored higher than the norms had clinical depression and vice versa. The present researcher established a Cronbach alpha reliability of .82. Items 2, 5, 6, 11, 12, 14, 16, 17, 18 and 20 were scored in reverse.

Procedure

The researcher obtained a letter from the Department of Psychology, Nnamdi Azikiwe University, Awka, identifying the researcher as a Post Graduate student of the Department. The letter stated the objectives of the study and requested that the researcher be permitted to conduct the research using the Prison inmates as participants. The researcher also wrote a personal letter seeking for permission to use the correctional facility as instructed by the correctional facility authority.

Upon writing a personal letter of permission to access the facility, a letter

of approval was granted by the prison authority, and the informed consent of each of the participants was obtained. The researcher having been approved, commenced the selection process, subsequently, and the therapy sessions began. With the assistance of three prison officers who have been dully trained and instructed, fifty (50) copies of 20 Self-Rating Depression Scale (SRDS) were distributed among inmates in each of the 6 cell blocks. After the self-rating scale were collated, the results were analysed. Inmates who scored above 49 on self-rating depression scale from each of the cell blocks were interviewed by the psychotherapists employed for the study to collaborate the result of the 20 self-rating depression scale. Sixteen questionnaire were discarded as a result of improper shading and filling of the items of the questionnaire. Five questionnaire were also dropped after the therapists employed for the study interviewed the inmates. The SRDS served as a pre-test for the study and also baseline for treatment. The score of above 49 was used as a baseline for selecting participants for the study. The participants were randomly assigned into 3 groups - two treatment groups (a group for logotherapy and a group for motivational interviewing) and one control group for the study. The therapy sessions were conducted in English language and only inmates who understood English language participated in the study. Participants that were chosen for the study were those who had spent 6 months and above in the prison, this was to make sure that it was the prison circumstances that caused the depression.

The therapy sessions were conducted by two clinical psychologists with post graduate qualifications and years of clinical practice with Enugu State Neuropsychiatric Centre. The therapies spanned for (10) sessions, which lasted for 5 weeks (2 sessions per week). The choice of 10 sessions of therapy was influenced by the fact that reviewed literature confirmed that both short term and long term application of both logotherapy and motivational interviewing were very effective. The therapies were conducted in group settings (Group therapy) as group therapy has the added benefits of positive social interaction, empathy, and support from peers.

The therapy involved a Pre-test, Treatment stage and Post-test. During the pre-test stage, participants were assessed to determine the severity of depressive symptoms before therapy commenced. All the participants were administered a Self-rating Depression Scale (SRDS) by William K. Zung (1965). This was in order to establish a baseline for the therapy. A baseline of 49 was adopted as the Nigerian norm for male according to Obiora (1995) was 48.77. Inmates who scored above 49 participated in the research.

Inclusion and Exclusion Criteria

Inclusion Criteria:

* Inmates who have the ability to understand and comprehend English Language

* Inmates who have been in Prison custody for a minimum of 6 months.
* Inmates who are lucid and responsive.
* inmates who are willing

Exclusion criteria
* Female inmates
* Inmates who are in any psychotic state
* Inmates who do not meet the inclusion criteria
* Unwilling inmates

Treatment Procedure
Participants selected for the study using the pre-test baseline were randomly assigned to two treatment groups (Group 1 for logotherapy, Group 2 for motivational interviewing) and one Control Group. There was a total of 10 sessions for the therapy, which lasted for a period of 5 weeks (2 sessions per week) with each session lasting a duration of 60 minutes. The control group did not receive any therapeutic intervention during the course of the experiment, but were treated afterwards. As their treatment is part of the therapist's ethical responsibility, having diagnosed them of the condition.

Logotherapeutic technique

Stage 1: Introduction
This is the first stage of the therapy and it lasted one session. Here, the therapists organized the sitting arrangement of the session. The participants were arranged in a semi-circle, with the therapists and the research assistant forming part of the semi-circle. The therapist and the research assistant established rapport by first introducing themselves to the participants and the participants in turn introduced themselves. The participants were assured of the confidentiality of interactions within the sessions. The participants were encouraged to interact with each other and to share their experiences; the therapist did this by asking open-ended questions.

In this session, ground rules for the therapy sessions were outlined. The participants were told that it was important to attend all the sessions, be punctual and orderly and to keep the interactions of the group within the group.

Generally, logotherapy interventions are based on three primary techniques: paradoxical intention, dereflection, and Socratic dialogue. Participants receiving logotherapy were guided through these levels.

Stage 2: Paradoxical intention
Paradoxical intention is an attempt to help clients face the situations they are most afraid of. This technique works by establishing the anticipatory depressive symptoms that the inmates are suffering from and make it hard for them to move forward. Participants in this stage were taught to face the worse of the situation. Here, the inmates were guided on how to overcome depression without the use of medications.

Stage 3: Dereflection
Dereflection is developed from the idea that when a person is suffering from

mental health problems, such as depression, they are more likely to become hyper-reflective, thus focusing more on themselves and their perceptions. The dereflection technique helps to deflect internalization that manifests in perpetual self-examination and assist in seeking external meaning to the experiences and behaviours. Inmates were taught to shift attention from their present predicament and to focus on life after prison which will definitely be better.

Stage 4: Socratic dialogue technique

It is an interview-based therapy where questions are asked in a manner that guides the client to take personal responsibility for their life's meaning and purpose. Questions asked here are designed to assist the patient in finding meaning to traumatic experiences.

Structure of logotherapy treatment plan

SESSIONS	**SESSION CONTENT**
Session 1	Introduction and orientation of the participants on logotherapy
Session 2	Assessed participants' concerns Set initial treatment Plan/Goal
Session 3	Assessed participants' concerns Using paradoxical intention method
Session 4	Re-assessed goals/ paradoxical intention method
Session 5	Dereflection application
Session 6	Continued Dereflection application
Session 7	Application of Socratic dialogue
Session 8	Continued Socratic dialogue
Session 9	Skills for relapse prevention Discussed end treatment and prepare for maintaining changes
Session 10	End treatment and help participants maintain changes.

Motivational interviewing

There are four stages used in motivational interviewing. These help to inculcate trust and connection between the client and the clinician, concentrate on maladaptive behaviours that may need to be changed and discover reasons why the patient may have for changing or holding onto a behaviour. This helps the clinician to support and assist the patient in their decision to change their behaviour and plan steps to reach this behavioural change.

Stage 1: Engaging

In this step, the clinician gets to know the participants and understands what is going on in the participants' life. The clinician disposes the participants to feel comfortable, listen to and fully understand from their own point of view. This helps to build trust with the patient and builds a relationship where they will work together to achieve a shared goal. The clinician must listen and show empathy without trying to fix the problem or make a judgement. This allows the patient to open up about their reasons for change, hopes, expectations

as well as the barriers and fears that are stopping the patient from depression. The clinician ask open ended questions which helps the patient to give more information about their situation, so they feel in control that they are participating in the decision-making process and the decisions are not being made for them. This creates an environment that is comfortable for the patient to talk about change. The more trust the patients have towards the clinician, the more likely it will reduce resistance, defensiveness, embarrassment or anger the patients may feel when talking about a behavioural issue.

Stage 2: Focusing

This is where the clinician helps the inmates find and focus on those things or areas that are causing depression in their lives. This step is also known as the "WHAT?" of change. The goal is for the clinician to understand what is important to the patient without pushing their own ideas on the patient. The clinician needs to ask questions to understand the reasons why the patient would be motivated to change and choose a goal to live a life free from depression. The inmates must feel that they share the control with the clinician about the direction and agree on a goal. The clinician will then aim to help the inmates order the importance of their goals and point out the current behaviours/ thinking that get in the way of achieving their new goal or "develop discrepancy" between their current and desired state of life. The focus or goal can come from the inmates, situation or the clinician. There are three styles of focusing; directing, where the clinician can direct the patient towards a particular area for change; following, where the clinician let the patient decide the goal and be led by the inmates priorities, and; guiding, where the clinician leads the inmates to uncover an area of importance.

Stage 3: Evoking

In this step the clinician asks questions to get the inmates to open up about their reasons for deciding to live a life free from depression. This step is also known as the "WHY?" of change. When this stage is done well, inmates reinforces their reasons to change and they find out they have more reasons to change rather than to stay the same. The clinician listens to and recognise "change talk", where the inmates are uncovering how they would go about change and are coming up with their own solutions to their problems. The clinician supports and encourages the inmates when they talk about ways and strategies to live a depressed free life, as the inmates are more likely to follow a plan they set for themselves. When the inmates are negative or are resisting change the clinician should "roll with resistance" highlighting reasons for a depressed free life. The clinician must resist arguing or the "righting reflex" where they want to fix the problem or challenge the inmates' negative thoughts. The clinician's role is to ask questions that guide the inmates to come up with their own solution to change. In this stage the

clinician can help the inmates in devising possible ways to manage depression only if the inmates ask for, but where they do not, the clinician can seek for the inmates' permission to help out

Stage 3: Planning

In this stage the clinician helps the inmates in planning how to manage their depression and encourages their commitment to change. This step is also known as the "HOW?" of change. The clinician asks questions to judge how ready the inmates are to manage their depression and helps to guide the inmates in coming up with their own step by step action plan. In this step the clinician can listen and recognize areas that may need more work to get to the core motivation to change or help the patient to overcome uneasiness that is still blocking their behavioural change. The clinician should help the inmates to come up with 'SMART' goals which are; Specific, Measurable, Achievable, Relevant and Time bound. This helps to set benchmarks and measure how their behaviour has changed towards their new goal.

Structure of motivational interviewing treatment plan

SESSIONS	**SESSION CONTENT**
Session 1	Introduction and orientation of the participants on logotherapy
Session 2	Assessed participants' concerns
	Set initial treatment Plan/Goal
Session 3	Assessed participants' concerns. Engaging the inmates in change talk
Session 4	Re-assessed goals/ engaging the clients
Session 5	Focusing
Session 6	Continued focusing
Session 7	Evoking
Session 8	Evoking /Planning to change
Session 9	Planning to change and prepare for maintaining changes
Session 10	End treatment and help participants maintain changes.

Design and Statistics

The research was an experimental study as the researcher studied the effect of logotherapy and motivational interviewing on the management of depressive symptoms among inmates of Nnewi correctional facility. The study used a pre-test and post-test between subject design that made up of Group A for logotherapy, Group B for motivational interviewing, and Group C for the control Group.

ANCOVA was used to analyse the between subject results of the experimental and control groups. The mean, standard deviation, statistical significance were derived. Statistical Package for Social Sciences (SPSS, version 23) was the medium used to analyse the data collected.

RESULT

Table 1: Summary table of Mean and Standard deviation for pre-test and post-test groups on Logotherapy, Motivational Interviewing and Control Group

	MEAN PRETEST	SD	MEAN POSTTEST	SD	N
Logotherapy	57.50	7.91	39.26	6.04	10
Mot. intervi	56.00	3.56	44.20	5.22	10
Control	56.56	6.33	55.33	5.60	9

The mean table showed that the pre-test score of logotherapy is 57.50 with a standard deviation of 7.91, whereas the post test score is 39.26, with a standard deviation of 6.04. The pre-test score of motivational interviewing is 56.00, with a standard deviation of 3.56, whereas the post test score is 44.20, with a standard deviation of 5.22. The pre-test score of control group is 56.56, with a standard deviation of 6.33, whereas the post test score is 55.33, with a standard deviation of 5.60.

Table 2: Summary table of ANCOVA showing the overall effect of logotherapy and motivational interviewing on depressive symptoms among the participants.

Source	Type III Sum Squares	df	Mean Square	F	Sig	Partial Eta Squared
Corrected Model	1280.768	3	426.923	13.421	.000	.617
Intercept	412.935	1	412.935	12.982	.001	.342
Tpretest	28.768	1	28.768	.904	.351	.035
Treatment	1267.191	2	633.595	19.919	.000	.614
Error	795.232	25	31.809			
Total	63440.000	29				
Corrected Total	2076.000	28				

The ANCOVA result showed that there was no significant difference in the pretext/ base line score among the different randomized groups (logotherapy, motivational interviewing & control). F (1, 29) = .904, p = .35. The effect size was small Ɒ .03

The main analysis showed that there was a significant mean difference in the post test scores of the different experimental conditions for logotherapy, motivational interviewing and control respectively F (2,29) = 19.92, p = .00, effect size was Ɒ .61 (see table 3), specifically, the result of the post hoc analysis suggested that there was a statistically significant mean difference between the inmates who received Christocentric therapy mean score = 39.40, standard deviation = 6.04 and control group mean 55.33, standard deviation = 5.59 in their post test scores in depression. Similarly, the post hoc result showed that the inmates who received motivational interviewing significantly scored low mean score 44.20, standard deviation = 5.22 in depression in the post test than the control group. However, there was no statistical significant difference in the post test mean scores between the inmates who received logotherapy and motivational interviewing.

Table 3: Summary table of post-hoc comparison of Logotherapy, Motivational Interviewing and control

		Mean Difference	Std. Error	Sig.
Logo Vs Control	-	16.09	2.60	.00
Moti. Inter Vs Control	-	11.04	2.59	.00
Logo Vs Moti. Inter	-	5.06	2.54	.17

Summary of Findings

1. The first hypothesis was accepted, as there was significant difference in depressive symptoms between pre and post treatment scores among inmates after administration of logotherapy.
2. The second hypothesis was accepted, as there was significant difference in depressive symptoms between pre and post treatment scores among inmates after administration of Motivational Interviewing.
3. The third hypothesis was rejected, as there was no significant difference between the two therapies when compared.

Discussion

This study examined the effect of logotherapy and motivational interviewing on depressive symptoms among inmates of Nnewi correctional centre. Three hypotheses were stated and they guided this study. The first hypothesis which stated that logotherapy would reduce depressive symptoms among inmates was accepted.

The result of the first hypothesis is consistent with the work of Kang *et al.*, (2013), who investigated the effects of logotherapy on life respect, meaning of life, and depression of older school-age

children. A non-equivalent control group and non-synchronized design was conducted with a convenience sample of 142 students. Students were assigned to the experimental group (n=70) or the control group (72). Data were analyzed using descriptive statistics, Chi-square, Fisher's exact test, t-test, and repeated measured ANOVA**.** They found that meaning of life and life respect increased significantly and depression decreased significantly for participants in the experimental group. Another study that supports the finding of this study is by Robatmili *et al.*, (2015), who examined the effect of group Logotherapy on meaning in life and depression Levels of Iranian students. Data were collected from 10 subjects in an experimental group and 10 in a control group. The experimental group participated in 10 sessions of group logotherapy, whilst the control group received no intervention. The mean scores for depression levels was significantly lower in the experimental group than in the control group and significantly higher in regard to meaning in life. They also found that group logotherapy has the potential to reduce depression levels and improve the meaning in life of university students.

Frankl's experiences in the concentration camps confirmed his view that it is through a search for meaning and purpose in life that individuals can endure hardship and suffering. The result of the first hypothesis and some empirical works reviewed have shown that discovering purpose and meaning can ameliorate psychological distresses. This view seems to be in tandem with the African worldview and that could be the reason why Logotherapy as a treatment modality will be effective for Africans. Africans believe that the only thing for which you have struggled will last, and this can be likened to Frankl's search for purpose.

The second hypothesis which stated that Motivational interviewing would reduce significantly depressive symptoms among participants was also accepted. According to Miller & Rollnick (2013), motivational interviewing techniques rest on the findings in clinical experience and research that simply show that clients who believe that they can change do so, and those who are told that they are not expected to improve indeed do not. Studies show that change talk, particularly in clinical settings, has been linked with successful behaviour change (Sobell & Sobell, 2008). The second finding of this work has demonstrated that change talk can actually benefit inmates as pertains to amelioration of depressive symptoms.

Some empirical findings have supported the second finding of this research. The work of Lovejoy (2012) which examined whether telephone-delivered Motivational Interviewing targeting Sexual risk behaviour reduces depression, anxiety, and stress in HIV-Positive Older Adults has hugely supported the second finding of this research. Participants were 100 HIV – positive adults 45+ years old enrolled in a sexual risk reduction pilot clinical trial of telephone – delivered motivational

interviewing. Participants were randomly assigned to a one – session motivational interviewing, four – session motivational interviewing, or standard of care control condition. Telephone interviews at baseline and 3 – and 6 month follow – up assessed sexual behaviour, depression, anxiety, and stress. Results showed that participants in one session Motivational Interviewing and four session Motivational Interviewing sessions reported lower level of depression, this indicated that motivational interviewing was effective in the reduction of depression. Another work that is consistent with the finding of this study is that of Keeley et al., (2016) on whether motivational interviewing improves depression outcome in primary care: A cluster randomized trial. Ten care teams were randomized to motivational interviewing with standard management of depression (MI-SMD; 4 teams, 10 providers, 88 patients) or SMD alone (6 teams, 16 providers, and 80 patients). Patients were assessed at 6, 12 and 36 weeks with the Patient Health Questionnaire-9 (PHQ-9). Treatment receipt was ascertained through patient inquiry and electronic records. The findings portrayed that motivational interviewing contributed so much in amelioration of patient's depressive symptoms.

A lot of people who are suffering from one psychological illness or other want to be liberated but often they are faced with ambivalence. The finding of the second hypothesis, coupled with some empirical works reviewed have demonstrated that when people are encouraged and motivated they can actually get relieve from their psychological illnesses.

The third hypothesis which stated that participants treated with Logotherapy would experience more symptom reduction than those treated with Motivational interviewing was rejected as there was no significant difference between the post-test scores of Logotherapy and the post test score of Motivational interviewing.

Implications of the Study

1. The findings of this study implies that the benefit of alternative forms of therapy cannot be disregarded in the therapeutic process. The participants in the study benefitted from- alternative psychotherapeutic interventions that reduced their level of depressive symptoms.
2. The findings of the study also implies that data has been added to the limited body of information available on the efficacy of Logotherapy and Motivational interviewing on the management of depression in Nigeria. The findings of this work can be used for reference purposes.
3. The findings of this study will help in devoting attention to the application and use of psychological techniques in the management of mental disorders within the Nigerian population.
4. The findings of this study will also reveal in no small measure how

quest for meaning can be utilized as a therapeutic tool.

Recommendations

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

1. Mental health professionals across different settings; hospitals, schools, prisons, should employ Logotherapy and Motivational interviewing in the management of depression.
2. Logotherapy and motivational interviewing should be used not just in the management of depression but also in the management of other mental illnesses.
3. It is further recommended that clinicians should use the search for purpose as a therapeutic tool in the management of depression.
4. Moreover, psychotherapist should focus on educating clients on their psychological problems as doing so will serve as a veritable psychotherapeutic tool.

Limitations of the Study

This research study was restrained by the following limitations;

1. Nigerians are yet to come to terms with psychological therapeutic modalities and their benefits. Most of the inmates were not convinced that their depressive symptoms can be taken care of with mere talking therapy. Thus, more advocacy on this misperception should be encouraged.
2. All the participants heard of logotherapeutic modality for the first time and it took time to tell them about logotherapy and how it operates.
3. Although depression is a mental disorder that affects people across different population, the participants employed in the study were drawn only from the prison population. The sessions for both therapies were conducted in group sessions. Although group therapy has many benefits, but it is not most effective in capturing or addressing unique dysfunctional thought patterns and cognition in all the participants involved in logotherapy.
4. Only male participants were employed in the study. It is unclear whether there would be a gender variation in the efficacy of both therapies. Therefore, the study should be replicated with female participants.

Suggestions for Further Studies

The following suggestions were made for further studies in this area:

1. A more representative sample should be used in future studies, this will aid in generalization of the finding of this present study.
2. The researcher suggests that both therapies in this study be applied to clients outside the prison setting to ascertain its efficacy in managing depression in sufferers outside prison setting.

3. The efficacy of both therapies in the study should be assessed in mental conditions other than depression, such as anxiety disorders and post-traumatic stress disorder
4. The researcher suggests that both therapies be applied on female participants to assess any gender variation in its efficacy as this study only engaged male participants.

Conclusion

The study examined the efficacy of Logotherapy and Motivational interviewing on the management of depressive symptoms using inmates in Nnewi correctional facility. Three hypotheses were tested. Thus, the first hypothesis which stated that Logotherapy would be effective in reducing depressive symptoms among participants was accepted. Further, the second hypothesis which stated that Motivational interviewing would be effective in reducing depressive symptoms among participants was also accepted; and the third hypothesis which stated that participants treated with Logotherapy would experience more symptom reduction than those treated with Motivational interviewing was however rejected. The result showed that both treatment modalities reduced depression symptoms as shown in the findings of this research which reflected in the lowered scores of the Self-rating depression scale used in the assessment. Although the result did not show any significant difference in the efficacy of both therapies.

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