

# Effectiveness of Talk Therapy Intervention on Depression and Low Self-Esteem of Retired Medical Practitioners Suffering from Dementia

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## ABSTRACT:

### Background

This study investigated the effectiveness of talk therapy intervention on depression and low self-esteem. Dementia is degeneration and weakening of brain cells that affects one's overall wellbeing. People affected by dementia tend to feel depressed and lose interest in activities they previously enjoyed.

### Objective

The aim of this research study was to intervene and rejuvenate Retired Medical Practitioners affected by Low-Self-Esteem and Depression due to Dementia. Talk therapy was adopted as an intervention strategy to treat 197 participants. Data was collected on participants' depression, self-esteem and dementia levels before and after the intervention exercise.

### Methods

The study adopted a randomized pre-test, post-test and control group design to investigate the effectiveness of Talk Therapy intervention strategy in treating depression and low self-esteem caused by dementia. The data obtained with the questionnaires were analyzed using the mean, standard deviation, and analysis of covariance (ANCOVA).

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**Results**

The post-test results from the experimental group revealed that talk therapy was efficient in reducing the depression level and boosting the self-esteem (SE) of the respondents. The posttest result from the experimental group also depicted that the participants' dementia level was significantly reduced with the help of the talk therapy intervention; as the subjects began to recall past events faster and better.

**Conclusions** Talk therapy (TT) is an appropriate and efficient intervention to improve self-esteem and reduce depression among the participants. TT intervention has the potentials of helping the participants remember past events faster than before the intervention.

**Keywords:** Dementia; Depression; Talk Therapy; Self-Esteem; Medical Practitioner.

**1. Introduction**

Attaining old age is a fascinating thing that almost every human being will want to experience. It is a time and stage when living cells and vital organs decline in their functions. This natural phenomenon makes old age seem to come with some health challenges. Deteriorating of the brain cells called dementia is mostly affects old people. Dementia is the loss of cognitive functioning which impairs word fluency, understanding, judgment, mood, movement, how people think, speak, remember, reason, feel, behave, engage in daily and economic activities. Some people with dementia cannot control their emotions. Patterson (2018) is of the view that dementia encompasses neurodegenerative diseases like; Alzheimer's disease, Vascular dementia, mixed dementia and Frontotemporal dementia.

Dementia is caused by a variety of cases that lead to the weakening or damage of the brain cells. Dementia may be as a result of inactivity of the brain; that is when an aged person does not engage in activities that involve constant use of the memory, such creates a vacuum for dementia to set in. Dementia can also be due to injuries that block blood flow in and out of the brain, depriving it of needed oxygen and nutrients (Nelson, Dickson, Trojanowski, Jack,

Boyle, Arfanakis, et al, 2019). Brain cells and tissues degenerate without oxygen. The brain has many distinct regions, each of which is responsible for different functions (for example, memory, judgment and movement). When cells in a particular region are damaged, that region will lose the capacity to function optimally.

Dementia ranges in severity from the mildest stage, to the most severe stage, when the person must depend completely on others for basic activities like, feeding oneself. A person affected by dementia may see or hear things that other people do not (hallucinations and hearing voices. Decline in mental function is often age determined. It's estimated that about 50% of people age 85 and older have dementia. As more people are living longer, dementia is becoming more common and there is need to diagnose it early.

Dementia can be diagnosed with the help of technological and non technological methods. Developing nations like Nigeria use non technological tools such as The Dementia Severity Rating Scale (DSRS) (Xie, Ewbank, Chittams, Karlawish, Arnold, & Clark, 2009), to diagnose dementia since the lack the best technologies needed for the diagnosis. Advanced countries like the U.S., Italy, and China lay emphasis on the importance of

employing assistive technologies and artificial intelligence for early diagnosis of Dementia (Azizan, Endrini, & Abdullah, 2025). That is to say that developed nations diagnose Dementia with the use of sophisticated technologies tools like Cognitive and Neurological Tests (CNT), Computed Tomography (CT), Magnetic Resonance Imaging (MRI), Cerebrospinal Fluid (CSF) Tests and Blood tests (BT). Despite the fact that the use of modern technologies enhances quality of life and disease management, it does not provide cognitive, emotional sociological support (Azizan, 2025).

Dementia tends to be the reason many retired teachers in Nigeria encounter difficulties in taking care of themselves or controlling their emotions. There are lots of dementia cases in Nigeria. Azizan (2025) posited that dementia cases are increasing significantly. In Nigeria, dementia has a crude prevalence rate of approximately 4.9% (3.0%–6.9%) among adults aged 60 and older. Between 1995 and 2015, dementia cases grew by more than 400%, from an estimated 63,512 to 318,011, with prevalence being higher in women (6.7%) than men (3.1%) (Azizan, Endrini, & Abdullah, 2025). Dementia is a growing concern in Nigeria (Baiyewu, Yusuf, & Ogundele, 2015). The prevalence and cases of dementia have increased in Nigeria over the last two decades. It is estimated that the prevalence of dementia in Nigeria is 5% (3.0–6.9 (Clark, & Ewbank, 1996). In Nigeria, the percentage ratio of female to male dementia cases stands at 6.7% is to 3.1% (Adeloye, Auta, Ezejimofor, Oyedokun, Harhay, Rudan, & Chan, 2019). Despite the high rate of dementia cases in Nigeria, the country has no national strategy for dementia care of the elderly (Olayinka, & Ogundele, 2024). As a result of that, Nigeria lacks data for the safety, protection and monitoring of cognitively impaired adults. A national dementia strategy, informed by global best practices tailored to Nigeria's unique cultural and societal context, is essential for addressing the challenges of dementia care and improving the well-being of affected individuals in Nigeria (Oluwagbemiga, 2024). Dementia is

one of the most remote and immediate causes of depression in old adults. Dementia has a way of compelling its sufferers to lose interest in their usual activities, and become depressed.

Depression is a common and serious medical illness that negatively affects how people feel, act, eat, sleep, concentrate, make decisions, think about suicide, life and death. Depressive disorder (DD) is one of the most widespread forms of psychiatric pathologies in globally. DD is both hereditary and environmental. Depression is more than 40% heritable. Environmentally, it results from intense worries, psychological breakdown and emotional rupture due to life threatening situations such as wars, illness dementia can cause depression (Azizan, Endrini, & Abdullah, 2025). Depression can lead to a variety of problems; emotional, physical and mental functioning (Azizan, 2025). DD tends to poses a problem to patients' studies, work, social activities, and relationships with family, friends and community.

Women are more likely than men to experience depression. Some studies show that one-third of women will experience a major depressive episode in their lifetime. A study has it that 5% of adults (4% among men and 6% among women), and 5.7% of adults older than 60 years. Another study has it that depression is about 50% more common among women than among men. Baiyewu, Yusuf, and Ogundele (2015) averred that worldwide, more than 10% of pregnant women and 13% of women who have just given birth experience depression for one reason or the other. In the year 2003-2004, about 7% of elderly people in the Yoruba-speaking regions of Nigeria experience depression disorder (Etaugh, 2004). More than 700 000 people die every year of suicide induced by depression (WHO, 2023). Depression has a way of lowering the self-esteem of those affected by it.

Self-Esteem (SE) has to do with how we feel about ourselves. It is the opinion and belief we have about our value, characteristics, confidence, worth, abilities and behaviors

(Wang, Tian, Wang, Wang, 2021). Self-esteem, self-concept, self-image and self-worth have the same root and consequence.<sup>15</sup> An individual's self-esteem may be high or low (Gureje, Kola, & Afolabi, 2007). Low self-esteem occurs when people look down on themselves or see themselves as useless and worthless. Low self-esteem and the feeling of worthlessness can lead to sudden death. (Hunter, Linn, & Harris, 1981). There is an urgent need to rehabilitate retired medical practitioners suffering from depression and low self-esteem due to dementia. It is unfortunate that most of past studies reviewed revealed that dementia has no cure (Woolfolk, 2010).

It is against this backdrop that the researchers seek to investigate if Talk Therapy (TT) intervention could be used to reduce and abate Dementia to a manageable extent and consequently boost self-esteem and reduce the depression level of the participants. Talk therapy intervention is a psychological treatment for mental and emotional problems like stress, anxiety and depression. TT tends to help in improving mental health of patients. TT and psychological interventions for people affected by dementia (Sigelman, & Rider, 2003). Talking therapies for depression and anxiety may be beneficial for people with atypical dementia (Charlesworth, Eastham, & Morris, 2025). It has been validated that dementia can be alleviated by talk therapy (Yiannopoulou, 2020). Psychological treatments have the potential of reducing risky behaviours and making people feel better (Xu, Wei, Hou, Demir, & Shen, 2025). The researchers want to find out if adopting a one-to-one talk therapy intervention could help in improving the power of recall and remembering of dementia patients, aid them to come out of depression, and regain their self-esteem by being able to recall their past experiences and to feel happy and good again. Dementia has a way of making its victims feel dejected and worthless, and such feelings weakens and breaks down people's emotions.

Depression sets in when an individual feels helpless and irredeemable. Such feelings tend to

make people lose interest in life and previously enjoyed activities. It is imperative to intervene and treat Retired Medical Practitioners affected by Low-Self-Esteem and Depression due to Dementia hence, the need for this study. Patients, Retirees, Retired Medical Practitioners, Subjects and Participants are used interchangeably in the context of this study. The researchers wondered whether Talk therapy (TT) could help the participants to live a meaningful and happy life again.

## 2. Methods

This study adopted a randomized pre-test, post-test and control group design. A randomized pre-test, post-test and control group design is considered suitable for this study because, intact or existing groups were used for experimental and control groups. Pretest-posttest randomized experimental design is used in real life conditions and investigations, where there are existing groups like we have in this study.

Talk Therapy was adopted as an intervention strategy to treat depression and low self-esteem in retired Medical Practitioners affected by Dementia in South-Eastern Nigeria. A pilot study was conducted prior to this study to identify subjects who are affected by dementia using the Dementia Severity Rating Scale (DSRS). The Cornell Scale for Depression in Dementia (CSDD) was also used to identify the subjects who are affected by depression and low self-esteem due to dementia. The Dementia Severity Rating Scale (DSRS) is a brief informant-rated, multiple-choice questionnaire made up of 12-items that measure functional abilities and parallel CDR content (El-Baou, Saunders, Buckman, Richards, Cooper, Marchant, Desai, Bell, Fearn, Pilling, Zimmermann, Mansfield, Crutch, Brotherhood, John, Stott, 2024). Out of 519 retired Medical Practitioners identified as affected by depression and low self-esteem due to dementia, only 197 (83 Men and 114 Women) of them in the area of the study gave their consent to be part of the study. The participants were divided into: Treatment group and control group.

The Treatment group was made up of 98 adults while the control group comprised of 99 adults. The experimental group received with Talk Therapy (TT) intervention on dementia, self-esteem and depression. A pretest-posttest randomized experimental design is a type of experiment where participants get randomly assigned to either receive an intervention (the treatment group). The pathologies (depression, low self-esteem and dementia) levels were measured twice before the treatment group received the intervention - the pretest - and posttest after intervention. The control group or the placebo group was the group that received no treatment. The participants in the control group were allowed to live their normal life without intervention. Though, the pre and post tests were administered on both the treatment and control group. The control group was used to check the adequacy or effectiveness of the intervention/treatment.

A miniature study was conducted with the help of The Dementia Severity Rating Scale (DSRS), The Cornell Scale for Depression in Dementia (CSDD), DASS-21 on Depression and The Self-Esteem Questionnaire (SEQ) were adapted to identify and recruited the subjects who are affected by depression and low Self-Esteem. Most of the items in the instruments were restructured to suit the Nigerian socio-cultural context. Thereafter, the instruments including the Talk Therapy (TT) were validated by experts in Psychology, Mental Health and measurement and Evaluation of the University of Nigeria Nsukka to capture and suit Nigerian socio-cultural peculiarities of the participants. The essence of the validation was to evaluate the content coverage and appropriateness of the instruments in obtaining the correct data.

The researchers adopted and articulated ten funny stories from African folktales, from which the TT intervention was delivered. Then, the researchers recruited and trained ten (10) research assistants to enable them know how to deliver the intervention. The research assistants were trained using WebEx online platform for five (5) days, one hour (1hr) each day before

they got involved in the research study. The training method gave all the research assistants the opportunity to receive the training from their comfort zones. The research assistants are professions social workers. The researchers trained the research assistants on how to carry out the intervention excises. The researchers gave the research assistant the ten (10) funny stories adopted from African folktales. The researchers used storytelling, friendly discussions, provocative questions intervention to ensure that the subjects were able to recall the stories they were told in course of the study and also recall some of their past experiences. The research assistants were allowed to use any story pleasing to them at any given time in their interactions with the participants. In the first and second week, the researchers visited the participants in their homes and sought their consent for the study. After that, they started by chatting with the dementia patients who agreed to be part of the study. The aim of this was to familiarize with the subjects and make sure that they were comfortable with the exercise. The researchers and their research assistants visited the subjects two times per week. In the first and second week, the researchers began the intervention by telling the dementia participants funny stories. Thereafter, the researchers asked the participants to recall any part of the story they were told. In the third and fourth week, after chatting and telling the participants stories, the dementia participants were asked to recall the full story that was told to them and to remember the story they were told a day before. In the fifth and sixth week, they were asked to recall the story they were told a day before and also tell any story or past experience they could remember.

After six weeks of once in two days visitation, the subjects were asked to share a little of their past experiences. That was aimed at deciphering whether the talk therapy was effective in helping them to feel relaxed and remember past experiences. This study sought to know if Talk Therapy intervention will help to reduce depression and dementia to the lowest level by

improving the mental functioning of dementia patients and also improve their self-esteem by improving their sense of value. And there was a follow up four months after the study to determine the internalization.

Talk therapy was adopted as an intervention strategy to treat low self-esteem and depression in retired medical practitioners suffering from dementia. The short stories used in the talk therapy intervention were face validated by experts in Literary Studies and Cognitive Psychology to ensure their appropriateness and attention span for old people. Two adapted and trial-tested instruments were restructured and modified to capture the cultural peculiarities of retired rural teachers in Nigeria before they were used for the study. The instruments are the Self-Esteem Questionnaire developed by The Positive Way (1996–2023) and DASS-21 on the Depression scale modified by Xinqiao, Siqing, and Wenjuan (Xu, Wei, Hou, Demiris, & Shen, 2025). The DASS-21 has been widely recognized for its reliability and different forms of validity in a range of studies from different countries with different samples. Each of the three DASS-21 scales is measured with seven items. Specifically, the depression scale assesses the state of hopelessness, devaluation of life, and lack of interest/involvement in life generally. DASS-21 is a 21-item self-report which assesses hopelessness and devaluation of life. It is score on a 4-point Likert scale. Its score ranges from 0–28, where each number determines the depression level. DASS-21 was used to collect data on participants' depression levels before and after the intervention exercise. DASS-21 was used to elicit information on respondents' level of depression. The Dementia Severity Rating Scale (DSRS) is an informant report, dementia staging tool that is quick to administer and has previous been shown to differentiate between people with dementia and healthy controls. The Dementia Severity Rating Scale (DSRS) was developed by Dr. Christopher M Clark, Alzheimer's Disease Core Center, Department of Neurology, University of Pennsylvania, Philadelphia, Pennsylvania, USA.

The DSRS is similar to the CDR-SB, the DSRS incorporates a broad range of scores, making this instrument useful for quantifying all levels of functional impairment, and permitting the detection of fine increments of change over time (Turana, Y., Farina, N., & Banerjee, 2023)).<sup>22</sup> Reliability and validation studies have shown that the DSRS has high reliability, as well as a constant linear rate of change throughout the entire course of AD.

The Self-Esteem Questionnaire is a 22-item multidimensional 4-point rating scale ranging from strongly disagree (SD) to strongly agree (SA). Its scores range from 1 to 4 for each item, with higher values indicating higher self-esteem. It measures the self-esteem of the participants. The SEQ was used by the researchers to elicit information on respondents' self-esteem (Moelter, S.T., Glenn, M.A., Xie, S.X., Chittams, J., Clark, C.M., Watson, M., Arnold, S.E. (2015)).<sup>23</sup> Self-Esteem Questionnaire (SEQ) and DASS-21 were composite measures of self-esteem and depression. SEQ, DASS-21, DSRS and the CSDD were validated by three experts in the field of Psychology and Measurement and Evaluation of the University of Nigeria Nsukka who restructured and reformed the instruments before they were used to collect data for this study.

The Cornell Scale for Depression in Dementia (CSDD) is a 19-item, 20-minute, informant-based assessment. It is scored 0 (absent), 1 (mild or intermittent), or 2 (severe). It has total score range of 0–38. The CSDD was specifically developed to assess signs and symptoms of major depression in demented patients (Xinqiao, L, Siqing, P., Wenjuan, G. (2019))<sup>24</sup> The instruments were validated by experts in Measurement and Evaluation, Psychology and Mental Health sector in Nigeria. The experts modified the items in the instruments to fit the Nigerian cultural context and certified the appropriateness of the instruments for data collection in this study. The modification eliminated the problems that would have been encountered had the instruments not been restructured. Ten (10) research assistants took

the questionnaires to houses for the convenience of the respondents and collected the questionnaires the following day. The mean, standard deviation, and analysis of covariance (ANCOVA) were used for data analysis. ANCOVA was used to reduce the uncertain

changes of the variance of dependent variable (error) and make pure results as well as increases the analytical power. It was also used to covariate the pretest score in the intervention group identifies measure and control before the intervention.

### 3. Results

**Table 1: Pre-Test, Post-Test and Follow-Up of Talk Therapy on Depression**

| Talk Therapy    | N  | Pre-test  |      | Post-test |      | Follow-Up |      |
|-----------------|----|-----------|------|-----------|------|-----------|------|
|                 |    | $\bar{x}$ | SD   | $\bar{x}$ | SD   | $\bar{x}$ | SD   |
| Depression      |    |           |      |           |      |           |      |
| Treatment Group |    |           |      |           |      |           |      |
|                 | 98 | 3.49      | 0.40 | 1.61      | 0.23 | 1.60      | 0.22 |
| Control Group   | 99 | 3.50      | 0.43 | 3.51      | 0.44 | 3.51      | 0.44 |

Note: *Pre-test post-test and follow-up depression mean scores of respondents exposed to Talk Therapy (TT) and those not exposed to it.*

The result presented in Table 1 on depression shows a decline in the post-test and follow-up mean scores of participants' depression level. The table indicates differences in the pre-test, post-test, and follow-up depression mean scores of respondents exposed to talk therapy (TT) and those not exposed to it. The result indicates a pre-test mean score of 3.49 and standard deviation of 0.40 for the treatment group and a 3.50 mean score and a standard deviation of 0.43 for the control group. In the same manner, the result indicates a post-test mean score of 1.61 and a standard deviation of 0.23 for the treatment group and a mean score of 3.51 and a standard deviation of 0.44 for the control group.

Four months after the study was conducted, a follow-up data was collected from the subjects to determine whether the participants were still stable or not. The data collected as a follow-up

indicates a mean score of 1.60 and a standard deviation of 0.21 for the treatment group and a mean score of 3.51 and a standard deviation of 0.44 for the control group. The decline in the depression mean level of participants in the post-test and follow-up of the treatment group was possible with the help of the TT intervention. The decrease in the respondents' depression mean level in the treatment group from 3.49 to 1.61 and consequently to 1.60 indicates that TT is effective in reducing respondents' depression levels as measured by The Cornell Scale for Depression in Dementia (CSDD) and DASS-21. The depression level of respondents in the treatment group reduced when compared to those in the control group, who did not receive any intervention. In the same way, to further address the research question, the following hypothesis was posed to determine the effect of TT on SE.

**Table 2: Pre-Test, Post-Test and Follow-Up of Talk Therapy on Self-Esteem**

| Talk Therapy | N | Pre-test  |    | Post-test |    | Follow-Up |    |
|--------------|---|-----------|----|-----------|----|-----------|----|
|              |   | $\bar{x}$ | SD | $\bar{x}$ | SD | $\bar{x}$ | SD |

| <b>Self-Esteem</b> |    |      |      |      |      |      |      |
|--------------------|----|------|------|------|------|------|------|
| Treatment Group    | 98 | 1.63 | 0.20 | 3.86 | 0.43 | 3.87 | 0.46 |
| Control Group      | 99 | 1.65 | 0.23 | 1.66 | 0.25 | 1.66 | 0.25 |

Note: *Pre-test post-test and follow-up self-esteem mean scores of respondents exposed to Talk Therapy (TT) and those not exposed to it.*

The result presented in Table 2 on self-esteem shows an increase in the post-test and follow-up mean scores of participants' self-esteem. The variations in the pre-test, post-test, and follow-up self-worth mean scores of respondents exposed to talk therapy (TT) and those not exposed to it. The result indicates a pre-test mean score of 1.63 and standard deviation of 0.20 for the treatment group and a 1.65 mean score and a standard deviation of 0.23 for the control group. Similarly, the result indicates a post-test mean score of 3.86 and a standard deviation of 0.43 for the treatment group and a mean score of 1.66 and a standard deviation of 0.25 for the control group. After four months of the study, follow-up data was collected to determine whether the participants' self-worth was still stable or had dropped again. The data

collected as a follow-up indicates a mean score of 3.87 and a standard deviation of 0.46 for the treatment group and a mean score of 1.66 and a standard deviation of 0.25 for the control group. The increase in self-esteem mean of participants in the posttest and follow-up of the treatment group, as indicated by the mean, was as a result of the talk therapy intervention. The increase in the self-esteem mean score of the respondents in the treatment group from 1.63 to 3.86 and consequently to 3.87 depicts that TT was effective in improving participants' self-esteem level. The wide mean gap between the participants in the intervention group and the control group shows that the TT intervention caused the mean increase.

To further address the research question, the following hypothesis was raised.

$H_{01}$ : Talk-Therapy has no significant effect on Depression and Self-Esteem

**Table 3: An ANCOVA Table on the Effect of Talk-Therapy no Depression and Self-Esteem**

| N   | D.f | Mean Square | Std Error Mean | F    | Sig  |
|-----|-----|-------------|----------------|------|------|
| 197 | 196 | 2.96        | 0.071          | 2.08 | 0.01 |
|     |     | 3.81        | 1.93           | 2.10 | 0.01 |

Note: *An Analysis of Covariance (ANCOVA) of mean scores of Respondents exposed to Talk-Therapy and those who were not.*

Table 3 on depression shows an F-ratio of 2.08 with an associated probability value of 0.01 was obtained with regard to treatment as a main effect on the depression level of respondents. The mean scores of respondents who received talk therapy (TT) and those exposed to no treatment varied significantly. We rejected the null hypothesis ( $H_{01}$ ) because the associated

probability (0.01) was less than the benchmark of 0.05 for decision-making. In the same manner, the inference drawn is that TT has a significant effect on the depression level of respondents who received it. The result of this study wouldn't have been possible without the help of TT intervention. The result in Table 2 on self-esteem shows an F-ratio of 2.10 with an

associated probability value of 0.01 was obtained with regard to treatment as a main effect on the self-esteem of respondents. The mean scores of respondents who received talk therapy (TT) and those exposed to no treatment varied significantly. Since the associated probability (0.01) was less than 0.05 set as the benchmark for taking a decision, the null hypothesis ( $H_{01}$ ),

which stated that TT has no effect on self-esteem, was rejected. The inference drawn is that TT has a significant effect on the self-esteem level of respondents who received it, as it increased the self-esteem level of the respondents in the treatment group significantly. This result emerged due to the administration of TT on the participants.

**Table 4: Pre-Test, Post-Test and Follow-Up of Talk Therapy (TT) on Dementia**

| Talk Therapy    |    | Pre-test  |      | Post-test |      | Follow-Up |      |
|-----------------|----|-----------|------|-----------|------|-----------|------|
| Dementia        | N  | $\bar{x}$ | SD   | $\bar{x}$ | SD   | $\bar{x}$ | SD   |
| Treatment Group | 98 | 3.28      | 0.39 | 2.21      | 0.31 | 2.08      | 0.30 |
| Control Group   | 99 | 3.31      | 0.40 | 3.33      | 0.42 | 3.34      | 0.43 |

Note: A Pre-test post-test Dementia mean scores of respondents exposed to TT intervention and those not exposed to TT.

The result presented in Table 4 shows a decline in the post-test and follow-up mean scores of participants' dementia level. The table indicates differences in the pre-test, post-test, and follow-up dementia mean scores of respondents exposed to talk therapy (TT) and those not exposed to it. The result indicates a pre-test mean score of 3.28 and standard deviation of 0.39 for the treatment group and a 3.31 mean score and a standard deviation of 0.40 for the control group. In the same manner, the result indicates a post-test mean score of 2.21 and a standard deviation of 0.31 for the treatment group and a mean score of 3.33 and a standard deviation of 0.42 for the control group. After four months of the study, follow-up data was

collected to determine whether the participants were still stable or not.

The data collected as a follow-up indicates a mean score of 2.08 and a standard deviation of 0.30 for the treatment group and a mean score of 3.34 and a standard deviation of 0.43 for the control group. The decline in the dementia mean level of participants in the post-test and follow-up of the treatment group was possible with the help of the TT intervention. The reduction in the mean of the respondents in the treatment group from 3.28 to 2.21 and consequently to 2.08 demonstrates that TT is really effective in reducing respondents' depression levels. In the same way, to further address the research question, the following hypothesis was posed.

**H<sub>02</sub>: Talk-Therapy (TT) has no significant effect on Dementia**

**Table 5: An ANCOVA Table on the Effect of Talk-Therapy no Dementia**

| N   | D.f | Mean Square | Std Error Mean | F    | Sig  |
|-----|-----|-------------|----------------|------|------|
| 197 | 196 | 2.99        | 0.087          | 2.74 | 0.01 |

Note: A Dementia Analysis of Covariance (ANCOVA) of mean scores of Respondents exposed to Talk-Therapy (TT) and those who were not.

Table 5 shows an F-ratio of 2.74 with an associated probability value of 0.01 was obtained with regard to treatment as a main effect on the dementia level of respondents. The mean scores of respondents who received talk therapy (TT) and those exposed to no treatment varied significantly. Since the associated probability (0.01) was less than 0.05 set as the benchmark for taking a decision, the null hypothesis ( $H_{02}$ ) was rejected. In the same manner, the inference drawn is that TT has a significant effect on the dementia level of respondents who received it. The result of this study wouldn't have been possible without the help of TT intervention.

#### 4. Discussion

The result of the current study revealed that talk therapy was effective in improving the self-esteem of the participants. The above revelation is in agreement with a recent study that revealed that psychotherapy has the power to trim down risky behaviors like low self-esteem and depression (Antonio, 2022). Similarly, another study found that talk therapy is helpful to people experiencing low self-esteem (Alexopoulos, Abrams, Young, Shamoian, 1988). A similar study reported that talk therapy (psychotherapy) offers an effective way of improving self-esteem, self-worth, and self-confidence (Waka, Aniemeka, Adelakin, & Banjo, 2017).

The result of the current study also depicted that talk therapy reduced depression levels in dementia significantly. The above assertion is in line with a recently conducted study that indicates that talk therapy can significantly reduce depression and anxiety among individuals with dementia (Coopersmith, 1967). A study conducted by the University College London (UCL) researchers suggests that talk therapy may be effective in managing dementia-related depression and anxiety. Talk therapy was found to have the potential of helping people

with dementia manage depression and anxiety symptoms. In 2022, researchers from University College found that talk therapy helped 63% of people with dementia lower their depression or anxiety symptoms. (Shankland, 2018). It was revealed that talk therapy in the earlier stages of Alzheimer's disease can help to ease depression and improve quality of life (Warden, Hurley, & Volicer, 2003). The use of talk therapies helps people cope with specific difficulties, such as serious illness, bereavement, stress, anxiety or depression (Olayinka, & Ogundele, 2024). It was also found that regular talking therapies delivered in healthcare settings may be effective in managing symptoms of dementia. Mental health issues like depression and anxiety are common in people suffering from dementia. Talk therapy can help in improving the mental health of people with dementia. (Yiannopoulou, 2020). One study revealed that there is limited evidence that talking therapies were adequately effective for people with dementia. Talk therapies for depression and anxiety may be beneficial for people with atypical dementia. (Charlesworth, G., Eastham, & Morris, 2025).

#### 5. Conclusions

Talk therapy (TT) has proven to be an efficient tool for the treatment of low self-esteem and depression among retired medical practitioners suffering from dementia. One can unequivocally say that TT is an efficient apparatus that can aid therapists in boosting self-esteem and abating depression in individuals suffering from low self-esteem and depression. In this study, TT intervention also helped to treat dementia by helping the subjects remember past events fast. The results that emerged from this research study were possible due to the administration of talk therapy (TT) to the participants. That is to say that the participants recovered from low self-esteem and depression as a result of talk therapy intervention.

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## Declarations

### Confirm originality of work

This is an original research work which has not been published anywhere in part or full before now

### Declaration of No Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### Consent for Participation

The consent of the participants was sought and obtained before they were used for the study. The consent was oral: The participants gave their consent orally, as most of them said that they could not write very well due to illiteracy and preferred to give their consent orally.

**Consent for Publication**

All the Authors are aware of the intention to publish the manuscript; as they all agreed that the product of the research study will be published in a reputable journal.

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