

## EFFECTS OF GROUP COGNITIVE RESTRUCTURING ON PSYCHOLOGICAL DISTRESS OF AWAITING-TRIAL INMATES IN CORRECTIONAL CENTRES IN NORTH-WEST, NIGERIA

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### Abstract

This study evaluated the effects of Group Cognitive Restructuring on Psychological Distress of awaiting-trial Inmates in Correctional Centres in NorthWest, Nigeria. The study had two specific objectives, two research questions, and two null hypotheses. The study used a quasi-experimental design that involved pre-test and post-test. The population comprised of all 7,962 awaiting-trial inmates in correctional centres in North-west, Nigeria. 82 awaiting trial inmates from two intact Correctional Centres were randomly selected using the census technique. Respondents were sampled and randomly put into 2 groups (GCR and Control). Kessler Psychological Distress Scale (K10) was used for data collection in the study. The instrument was validated by experts and subjected to pilot study using Cronbach's Alpha with reliability co-efficient of 0.772. Each group received treatment for 8 consecutive weeks (60 min/wk). Data collected were subjected to descriptive statistics of mean, standard deviation and mean difference to answer the research questions. Inferential statistics of independent sample t-test were used to test the null hypotheses at  $P \leq 0.05$  level of significance. Results showed a significant difference between the mean post-treatment psychological distress of awaiting-trial inmates in correctional centres in Experimental Group and those in the Control Group. Also, there was a significant difference in the mean scores of male and female awaiting-trial inmates exposed to GCR counselling technique with PD and those in the control group. It was thus concluded that the use of both the GCR has high positive effect in reducing PD. The research recommends that a standardized structured CBT counselling technique treatment should be designed for correctional centres across Nigeria, and CBT counselling techniques could be used in the treatment of PD.

**Keywords:** Group Cognitive Restructuring, Rational Emotive Behavioural Therapy, Psychological Distress, Awaiting trial Inmates, Correctional Centres

### Introduction

Psychological Distress (PD) is a mental state of unpleasant feelings, emotions and thoughts. PD can affect how you think, feel, and behave, making life and daily activities difficult to manage. Studies have shown

that distress can also affect one's mental health and behaviour (Osasona & Koleoso, 2015). Persons suffering from PD may find it difficult to focus on making treatment decisions, scheduling follow-up appointments, and even taking medications that are important to treatment. In psychology, PD is a mood or emotional state characterized by low self-esteem, feelings of guilt, and an inability to enjoy life. People experiencing psychological distress usually experience some of the following symptoms: Sadness, hopelessness, pessimism, decreased self-esteem and increased self-esteem, decreased or lost ability to enjoy normal activities, decreased energy and vitality, slowness of thought or action, decreased appetite, sleep disturbances and insomnia. PD is present when a person's unhappiness has a definite reason and the depressed mood is disproportionately long lasting or severe relative to the triggering event (Mak & Chan, 2018).

One of the interesting concerns of many counselling psychologists, prison counsellors, and other psychotherapists is the distressing feelings of their clients. Adaptation difficulties and unhealthy reactions to external stimuli lead to psychological distress in prison inmates. Inability to cope in prison is typically the most hostile experience experienced by inmates, especially incoming inmates who believe the prison environment is difficult, unfriendly and stressful (Corston, 2007 & Partika, 2001). In Nigeria's prison conditions, malnutrition, poor sanitation and overcrowding often cause distress to many prison inmates (Okoro & Ezeonwuka, 2018). Counselling is the most effective and reliable treatment for this condition. Parkinson's disease has been treated with a number of counselling approaches such as cognitive-behavioural therapy, social skills therapy, life skills therapy, differential reinforcement, various behavioural modifications, self-explanatory strategies, and assertiveness, and their efficacy in treating PD has been investigated in many types of studies (Sheldon & West, 1990). This study evaluates the impact of two of his counselling techniques, namely cognitive restructuring (CR) and rational emotional behavioural therapy (REBT), on the treatment of PD.

Cognitive-behavioural therapy (CBT) was developed by Beck (1967) and is a psychological approach designed to counter pre-existing dysfunctional thoughts and false emotions that have negative psychological consequences. The main purpose of CBT is to teach clients how to change automatic thoughts and self-criticism and use CBT techniques to build a healthy personality (Beck, 1976). The bottom line is that negative thoughts cause abnormalities. Beck (1976) believed that belief systems influence emotional and behavioural responses. If a person's belief system is flawed (automatic thinking), that person can become maladaptive. Automatic beliefs include fearful, demanding, overgeneralization, selective abstraction, mind-reading, negative predictions, catastrophic, naming, misnaming, augmentation or minimization, and personalization. (DeRubeis, 2011).

Beck (1976) attributed mental health problems to how people perceive and perceive life events. Reality is accurately reflected when perceptions are positive and accurate. Otherwise, despair, depression, anxiety, anger and psychological stress will result. Beck (1976 and 1979) believed that CBT techniques could be used to replace unrealistic thoughts with realistic ones.

Cognitive Restructuring, Relaxation, and Coping Skills Training (CRCST) is a multicomponent cognitive-behavioural therapy developed by Pull (2007) for the treatment of depression and situational generalized anger. Group Cognitive restructuring (GCR) as part of cognitive behavioural therapy (CBT) recognizes and challenges irrational or maladaptive thinking and is commonly associated with many psychiatric disorders such as Parkinson's disease. It is the counselling process of learning to challenge irrational thinking (Diana, 2013). It has been used to help people suffering from a variety of mental illnesses, including depression, anxiety disorders, bulimia, and social phobia. This is also a technique that can help you understand what's behind your negative moods.

GCR is a tool that helps us understand and reverse negative thoughts. It helps us to carefully observe unhappy and negative thoughts, challenge them and often recognize the negative thoughts behind them. As a result, people are able to deal with situations with a positive attitude (Pull, 2007). Several studies have shown substantial benefit with the use of GCR-based therapy, and for this reason, this study attempts to explore its effectiveness in treating Psychological Distress (PD).

### **Statement of the Problem**

Imprisonment is one of the most stressful experiences ever for humans. Prisons and prison inmates find themselves in a bleak situation that is representative of the institution as a whole (Goffman, 1961). The environmental conditions in such facilities can be a significant source of stress for residents. Nowhere is this fact more clearly recognized than in prison inmates and in observing the physical and mental health of prisoners. Inmates suffer disproportionately from physical symptoms, acute illnesses, and chronic illnesses than the general population. Common ailments reported by inmates include fatigue, insomnia, headaches, weight gain and weight loss. The transitional period from the free world and the private residence of prisoners to the home of deprivation, confinement and obedience needs to be adjusted. Singer (2006) emphasized the need to change inmates' behavioural patterns, interpersonal relationships, emotions, and personality structures in order to survive the limitations imposed on them. Prison inmates are forced to wear clothes against their will and have strict rules about eating, sleeping and using the phone. Prisoners do not exercise their human rights/freedoms and are governed by strict and rigid rules, limits and boundaries (Singer, 2006).

Inmate dysfunction has been reported to have devastating effects (Haney, 2012). Inmates' misperception of the entire prison scenario makes it difficult for them to give up their freedom and autonomy to make their own decisions, leading to painful adjustments and psychological distress. Based on empirical research on the statistics and prevalence of psychological distress as mentioned above, psychotherapeutic interventions are essential to combat the adverse health of the person suffering from PD. As a result of the above-mentioned problems, the researchers intend to evaluate the effectiveness of group cognitive restructuring (GCR) in the reduction of psychological distress (PD) among prison inmates awaiting trial in Northwestern states of Nigeria.

### **Purpose of the Study**

The main purpose of the study is to investigate the effects of group cognitive behavioural therapies (GCBT) on the treatment of psychological distress (PD) of awaiting-trial inmates in Correctional Centres in North-West, Nigeria. Specifically, working on Group Cognitive Restructuring (GCR), the research was aimed to achieve the following objectives:

1. to investigate the mean post-treatment difference between the experimental and control groups of psychologically distressed awaiting-trial inmates exposed to GCR at correctional centres in North-West, Nigeria.
2. to evaluate the mean post-treatment difference between male and female psychologically distressed awaiting-trial inmates Exposed to GCR in North-West, Nigeria.

### **Research Questions**

The following research questions are asked to guide this study:

1. What is the mean post-treatment difference between the experimental and control groups of psychologically distressed awaiting-trial inmates exposed to GCR at correctional centres in North-West, Nigeria?
2. What is the mean post-treatment difference between male and female psychologically distressed awaiting-trial inmates exposed to GCR in North-West, Nigeria?

**Hypotheses**

The following null hypotheses are formulated and tested to achieve the objectives of this study at a 0.05 level of significance:

**HO<sub>1</sub>:** There is no significant difference in the mean post-treatment difference between the experimental and control groups of psychologically distressed awaiting-trial inmates exposed to GCR at correctional centres in North-West, Nigeria.

**HO<sub>2</sub>:** There is no significant difference in the mean post-treatment difference between male and female psychologically distressed awaiting-trial inmates exposed to GCR in North-West, Nigeria.

**Methodology**

The study adopted a pre-test and post-test quasi-experimental design. This design is used because the researcher intends to establish a cause-and-effect relationship between the independent and dependent variables in this research. This pretest-posttest Quasi-experimental design permits the researcher to reach reasonable conclusions about whether the intervention or event had an effect but does not allow for control over other factors that may have influenced the outcomes (Rogers and Revesz (2020). The population comprised of seven thousand, nine hundred and sixty-two (7,962) awaiting-trial inmates in sixty-seven (67) correctional centres of the seven states in North-west, Nigeria.

**Table 1: Distribution of Sample of the Study**

S/No	State	Prisons Selected	No. Awaiting Trial	Group Assigned	1 Jigawa
1			44	(GCR) EG	
2	Katsina	1	38	Control (CG)	
		<b>Total 3</b>	<b>82</b>	Source:	

Fieldwork, 2023

Eighty-two (82) awaiting-trial inmates from two intact Correctional Centres were selected using research assistants for the study. The first Correctional Centre was Birnin Kudu Satellite Prison, Jigawa state with 44 inmates. The Correctional Centre was assigned Experimental Group I (EG). The other Correctional Centre selected was Maximum-Security Prison Funtua, Katsina State with 38 inmates which constitute the Control Group (CG).

The census method was used to determine the sample size. This is one approach that makes use of the entire population as the sample (Singh & Masuku 2014). Although cost considerations make this impossible for large populations, a census is more attractive for small populations (e.g., 200 or less). A

census eliminates sampling error and provides data on all the individuals in the population. Commonly used in small, well-defined populations, census involves gathering data from every individual in a population, and provides accurate and precise information about the entire population (Shittu, 2023). Therefore, entire population has been sampled in small populations to achieve a desirable level of precision.

To identify inmates with the symptoms of Psychological Depression (PD), and to collect data for the study in the pretest and posttest, the study modified and adopted the Kessler psychological distress scale (K10). The adopted instrument is modified in two (2) sections; **Section A:** Socio-demographic variables of the participants (name of correctional facility, state, gender). **Section B:** 10 items on the 5 Likert Scale K10 questionnaire. Before the participants selection, an informed consent forms were completed by the respondents. The identities of the participants were not be documented in this study for the sake of confidentiality.

Descriptive statistics in form of frequencies and percentages was used to determine distribution of respondents by socio-demographic variables. The second section answers all the seven research questions using Mean and descriptive statistics. The decision rule was based on mean difference. A mean difference of  $<0.5$  was considered trivial difference while a mean difference of  $\geq 0.5$  was considered large difference. In the test of research hypotheses, *independent-test* was employed. The decision was based on submission of Singh and Masuku (2013), who suggested that *independent t-test* should be used to compare the means for two different groups.

### **Summary of Treatment Package**

Cognitive behavioral intervention program is developed based on CBT basic philosophy of Beck. The intervention is a group-based program aimed to reduce the level of psychological distress and replace it with improved psychological wellbeing of the awaiting-trial inmates in correctional centres using CBT assumptions. The intervention program was conducted and implemented by experienced Cognitive behavioral therapists who have worked with correctional centre inmates for years. The program manual will last for 8 weeks sessions (2 months) with 1 hour in each meeting (session). Each meeting held once per week.

### **Experimental Group: Group Cognitive Restructuring (GCR)**

Session 1 and 2: General orientation and administration of instrument to obtain pre-test scores.

Introductory talk (commitment to a goal)

Session 3: Identification of emotional distraction

Session 4: Identification of unrealistic beliefs

Session 5: Managing Anger

Session 6 to 7: Behaviour modification

Session 8: Revision of all activities in the previous session and administration of instrument for post treatment measures.

### **Results**

#### **Research Question One:**

1. What is the mean post-treatment difference between the experimental and control groups of psychologically distressed awaiting-trial inmates exposed to GCR at correctional centres in North-West, Nigeria?

**Table 2: Mean and standard deviation on post-treatment of psychological distress of awaiting-trial inmates exposed to CR and those in the control group**

Group	N	Mean	Std. Dev.	Mean Range
Group Cognitive Restructure	44	2.66	.745	±.94
Control	40	3.60	1.008	

Source: Fieldwork, 2023

Table 2 present the descriptive statistics of the post-treatment of psychological distress of awaiting-trial inmates in correctional centres exposed to CR and those in the control group. From the Table, the posttreatment mean score of psychological distress of awaiting-trial inmates exposed to CR was 2.66 against 3.60 for those in control group with standard deviations of .745 and 1.008 respectively. The mean difference was  $\pm .94$  (Large Difference) in favour of awaiting-trial inmates exposed to CR. The result therefore suggests that the post-treatment (CR) intervention has reduced the psychological distress of awaiting-trial inmates in North west, Nigeria.

**Research Question Two:**

What is the mean post-treatment difference between male and female psychologically distressed awaiting-trial inmates exposed to GCR in North-West, Nigeria?

**Table 3: Mean and standard deviation of male and female awaiting-trial inmates exposed to CR in correctional centres in North-west, Nigeria**

<u>Group Cognitive Restructuring</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Mean difference</u>
Male	28	2.14	.651	±.99
Female	16	3.13	1.360	

Source: Fieldwork, 2023

The outcome of the data used to answer research question six presented in Table 3 disclosed the mean of 2.14 with the standard deviation of .651 for 28 male awaiting-trial inmates exposed to CR. The 16 female awaiting-trial inmates in the group had mean of 3.13 with the standard deviation of 1.360. the mean difference between male and female awaiting-trial inmates exposed to CR was 0.99 (Large Difference) in favour of male. The result therefore shows that CR has more positive effect on male than female awaiting-trial inmates in North-west, Nigeria. **Test of Hypotheses**

The research hypotheses were tested at a 0.05 level of significance:

**HO<sub>1</sub>** There is no significant difference in the mean post-treatment between the experimental and control groups of psychologically distressed awaiting-trial inmates exposed to GCR at correctional centres in North-West, Nigeria.

**Table 4: Independent Sample t-test on post-treatment of psychological distress of awaiting-trial inmates exposed to GCR and those in the control group**

Group	N	Mean	Std. Dev.	Df	t	Sig. (2-tailed)	Remark
GCR	44	2.66	.745				
				82	-4.895	.000	<b>HO<sub>2</sub></b> <i>Rejected</i>
Control	40	3.60	1.008				

Source: Fieldwork, 2023

The output of *independent t-test* used to test null hypothesis two is as presented in Table 4. From the Table, the mean score of awaiting-trial inmates exposed to CR was 2.66 with the standard deviation of .745. Those in control group had mean of 3.60 with the standard deviation of 1.008 at degree of freedom of 82. The t-value stood -4.895 and the  $p=.000$  which was found to be less than the 0.05 level of significance. The outcome therefore shows that there was significant difference between the posttreatment of psychological distress of awaiting-trial inmates exposed to CR and those in the control group. This suggests that the CR has helped in reducing the psychologically distressed of awaiting-trial inmates in correctional centres in North-West, Nigeria. The null hypothesis was therefore rejected.

### Test of Hypothesis Two

**HO<sub>2</sub>** There is no significant difference in the mean post-treatment between male and female psychologically distressed awaiting-trial inmates exposed to GCR in North-West, Nigeria.

**Table 5: Independent Sample t-test on post-treatment of Male and Female psychological distress of awaiting-trial inmates exposed to GCR**

GCR	N	Mean	Std. Dev.	df	T	Sig. (2-tailed)	Remark
Male	28	2.14	.651				<b>HO<sub>6</sub></b>
				42	-3.245	0.002	<i>Rejected</i>

Female	16	3.13	1.360
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**Source:** Fieldwork, 2023

The test of null hypothesis six presented in Table 5 disclosed the mean and standard deviation of 2.14(.651) for male awaiting-trial inmates while the female had 3.13 (1.360). The *t*-value was -3.245 and the *p*-value .002. The result therefore suggested that there was significant difference between the posttreatment psychologically distressed mean scores of male and female awaiting-trial inmates. The posttreatment favours the male awaiting-trial inmates. The hypothesis was therefore rejected.

### Discussion of Findings

The findings of the study were discussed based on the major findings of the study. It is explained in the following:

Results of null hypothesis one of the Independent Sample *t*-test statistics in the study showed that a significant difference exists between the mean post-treatment psychological distress of awaiting-trial inmates in correctional centres in Experimental Group 1 (GCR) and those in the control group. Therefore, the null hypothesis which states that there is no significant difference in the mean posttreatment difference between the experimental and control groups of psychologically distressed awaiting-trial inmates exposed to GCR at correctional centres in North-West, Nigeria, is hereby rejected. This result agrees with the research conducted by Amoke, et al (2020) whose results showed that CBT had a significant effect on psychological distress of awaiting-trial prison inmates when compared to their counterparts in the no-intervention group at Time 2. It also concurs with the findings of Onyedibe, Chukwuemeka and Ifeagwazi (2020) whose adopted randomized controlled Pre-test Post-test design showed that participants in the CBT Group had decreased in anxiety and depression significantly at posttest and 2-month follow-up compared to the participants in the CG.

In a similar development, the study for null hypothesis 2 disclosed that there was significant difference between the post-treatment psychologically distressed mean scores of male and female awaiting-trial inmates. This shows that the male and female of the experimental group had significantly reduced mean PD scores than the male and female in the control group. Therefore, the null hypothesis which states that There is no significant difference in the mean scores of male and female awaiting-trial inmates exposed to GCR counselling technique treatment with PD and those in the control group, is hereby rejected. This does not go in line with the findings of Obikwelu (2017) whose result of study showed the interaction between NEFCRIP and gender on self-esteem and self-efficacy of recidivist was not significant. It also disagreed with the study of Beaudry, et. al (2021) whose synthesis gave evidence on Female adolescents having higher prevalence of major depression and PTSD than male adolescents.

### Conclusion

With the relevance to the findings of the effects of the GCR counselling technique treatment between treatment group and control group. It was observed that GCR treatment have significant effects in the reduction of PD. Therefore, the conclusion is that GCR technique has strong effect in the treatment of PD among the awaiting-trial inmates in North-West, Nigeria.



In comparison between the effects of GCR counselling technique treatment on male and female awaiting-trial inmates with PD, a deferential effect was recorded and it was identified that male inmates respond more significantly to GCR counselling technique than female ones.

### Recommendations

The following recommendations were made based on the outcome of this research work:

1. The federal government should design counselling programme that will be responsible for creating awareness to awaiting-trial inmates in Correction Centers on strategies to overcome PD.
2. The federal government should introduce GCR counselling technique for treating of PD awaiting-trial inmates in Correction Centers in North-West, Nigeria
3. Psychological services/counselling that is cognitive based should be set up as a regular programme in the Nigeria correctional Centres.

### Counselling Implication/Contribution to Knowledge

Implications of this study are that GCBT in general, and GCR in particular could help in reducing Psychological Distress. Counsellors, psychotherapists and Mental health professionals in practice could use GCBT in counselling awaiting trial inmates and other prisoners in correctional centres who show symptoms of mental disorders. Granted that the severity level of psychological symptoms associated with PD in male and female inmates could be minimized using GCBT, Nigerian public health professionals and other helping professionals are encouraged to explore cognitive behavioural technique in reducing PD or any form of mental disorders. Since the study outcome revealed the long-term effects of CBT, cognitive behavioural therapists, psychologists, school counselors, teachers in colleges, and other schools should adopt the principles of CBT in helping individuals with behavioural problems. By practicing the assumptions of CBT, inappropriate behaviours such as pathological behaviours and the types in which inmates excessively exhibit could be reduced using CBT.

Findings from this study will enrich the body of knowledge on mental health problems of prison inmates entering the prison; this will also help the criminal justice system in decision making, especially with emphasis on psychological evaluation of prison inmates before dispensing judgment. On the part of the prison authority, the prison inmates identified to have psychological distress and some forensic characteristics can be properly classified and kept in cells that will not aggravate their distress. On the part of the Correctional Centre authority, the prison inmates identified to have psychological distress and some forensic characteristics can be properly classified and kept in cells that will not aggravate their distress.

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