

**CORRECTIONAL ENVIRONMENT AND SELF-ESTEEM AS  
PREDICTORS OF PSYCHOLOGICAL DISTRESS AMONG  
INMATES IN KEFFI CORRECTIONAL CENTRE, NIGERIA**

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**ABSTRACT:** This study investigated the role of correctional environment and self-esteem as predictors of psychological distress among inmates in the Keffi Correctional Custodial Centre, Nasarawa State, Nigeria. A total of 250 inmates (200 males and 50 females) participated in the research, with validated scales used to assess their perceptions of the correctional environment, levels of self-esteem, and psychological distress. The study employed a survey design with purposive sampling to select participants from both convicted and awaiting trial inmates. Results revealed that both correctional environment and self-esteem significantly influenced psychological distress. Specifically, poor correctional conditions, including overcrowding and lack of mental health resources, contributed to heightened levels of distress, with the correctional environment explaining 34.7% of the variance in psychological distress ( $R^2 = 0.347$ ,  $\beta = 0.456$ ,  $p < .05$ ). Additionally, lower self-esteem was identified as a crucial factor exacerbating psychological distress, accounting for 46.3% of the variance in distress ( $R^2 = 0.463$ ,  $\beta = 0.467$ ,  $p < .05$ ). The joint influence of both correctional environment and self-esteem on psychological distress explained 41% of the variance ( $R^2 = 0.410$ ,  $\beta = 0.344$ ,  $p < .05$ ). The findings underscored the necessity for comprehensive policy reforms to improve the living conditions within correctional facilities and implement self-esteem enhancement programs to mitigate psychological distress. Based on these findings, it was recommended that correctional institutions adopt policies aimed at improving environmental factors, such as safety and emotional support, and provide inmates with mental health services and programs designed to boost self-esteem. This study contributed to the broader understanding of the psychosocial challenges faced by incarcerated individuals and called for systemic changes in correctional policy and inmate rehabilitation strategies.

**Keywords:** Correctional Environment, Self-esteem, Psychological Distress, Inmates, Mental Health

## **INTRODUCTION**

Psychological distress refers to a state of emotional suffering often characterised by symptoms of anxiety, depression, and stress. It is a broad term that encompasses negative emotional states resulting from various stressors, including life events, personal challenges, and social or environmental factors (Ridner, 2004). Psychological distress is not a clinical diagnosis in itself but can be a precursor to mental health disorders if left unaddressed (Drapeau et al., 2012).

According to Kessler et al. (2003), psychological distress can manifest in varying degrees, ranging from mild discomfort to severe emotional turmoil. The severity and persistence of distress depend on an individual's coping mechanisms, personality traits, and external support systems. Psychological distress can arise from different life situations, including financial problems, workplace stress, interpersonal conflicts, and traumatic experiences (Mirowsky & Ross, 2002). Several scholars have attempted to conceptualise psychological distress. Horwitz (2007) suggests that it is a transient emotional response to stressors, which may or may not lead to long-term mental health disorders. Similarly, Wheaton (1994) highlights that psychological distress results from chronic stress exposure and is influenced by socioeconomic factors, personal resources, and resilience levels.

Psychological distress is a state of emotional suffering characterised by symptoms of anxiety, depression, stress, and other negative emotions that interfere with an individual's cognitive, behavioural, and social functioning (Drapeau et al., 2012). It is not a clinical diagnosis but rather a general term used to describe mental strain that can range from mild to severe, often resulting from various stressors such as personal loss, financial difficulties, chronic illness, or workplace pressure (Ridner, 2004).

Psychological distress is considered a normal response to challenging life circumstances, but prolonged exposure to distressing situations can increase the risk of developing mental health disorders, including major depression and generalised anxiety disorder (Mirowsky & Ross, 2002). According to Kessler et al. (2003), psychological distress is prevalent in all populations but can vary in intensity based on individual resilience, coping mechanisms, and access to social support. Psychological distress is a worldwide concern affecting individuals across different cultural, economic, and social backgrounds. The global burden of distress-related mental health issues has been increasing, with rising cases of anxiety, depression, and stress-related disorders (World Health Organization, 2022). Social, economic, political, and environmental factors all contribute to variations in the prevalence and impact of psychological distress worldwide.

The World Health Organization (2022) estimates that nearly one in eight people globally experience a mental health condition, many of which stem from chronic psychological distress. The COVID-19 pandemic further highlighted the widespread nature of psychological distress, with significant increases in anxiety and depression observed across various populations (Pierce et al., 2020). Countries with lower access to mental health resources tend to experience higher rates of untreated distress, leading to long-term socioeconomic consequences. Psychological distress is particularly prevalent among vulnerable groups, including refugees, individuals in conflict zones, those experiencing economic hardship, and marginalized populations (Steel et al., 2014). In high-

income countries, workplace stress, financial instability, and social isolation contribute to distress levels, whereas in low- and middle-income countries, poverty, lack of healthcare and political instability are major stressors (Lund et al., 2010).

Different cultures perceive and respond to psychological distress in varied ways. Western societies often medicalize distress, viewing it through the lens of psychiatric conditions and emphasizing professional mental health interventions (Kirmayer, 2001). In contrast, many non-Western cultures interpret distress through spiritual, social, or community-based frameworks, relying on family support, religious practices, and traditional healing methods (Kleinman, 1988). For example, in many Asian cultures, psychological distress is often expressed somatically—through physical symptoms such as headaches, fatigue, or digestive issues—rather than verbalizing emotional suffering (Ryder et al., 2008). In African societies, communal support plays a crucial role in coping with distress, with extended families and local leaders often mediating mental health challenges rather than formal psychological services (Patel, 2012).

The increasing recognition of psychological distress as a global health issue has led to international efforts to improve mental health services. The WHO's Mental Health Action Plan (2013–2030) emphasizes integrating mental health care into primary healthcare systems, reducing stigma, and ensuring access to psychological support worldwide (WHO, 2023). However, disparities remain, with many low-income countries allocating less than 2% of their health budgets to mental health services (Saxena et al., 2007).

In many Africa, psychological distress is often linked to supernatural or spiritual causes, such as witchcraft, curses, or ancestral displeasure (Okello & Neema, 2007). Unlike Western biomedical models that categorise distress as a psychological or psychiatric condition, traditional African beliefs often associate distress with external forces requiring spiritual or communal intervention. This belief system affects how individuals seek help, with many preferring traditional healers, religious leaders, or community elders over mental health professionals (Gureje et al., 2015).

Additionally, psychological distress in African societies is commonly expressed through somatic symptoms—such as headaches, body pains, or fatigue—rather than through direct verbalisation of emotional suffering (Ryder et al., 2008). This somatic expression can lead to underdiagnosis or misdiagnosis in medical settings, where patients may seek treatment for physical ailments without addressing underlying psychological distress.

In Nigeria, psychological distress is often not viewed as a medical or psychological issue but rather as a spiritual affliction or a moral weakness (Gureje et al., 2015). Many Nigerians believe that mental health issues are caused by witchcraft, ancestral curses, demonic possession, or spiritual attacks (Adeosun, 2016). As a result, people experiencing psychological distress are more likely to seek help from pastors, traditional healers, or Islamic clerics rather than mental health professionals (Gureje et al., 2006).

While psychological distress among inmates is globally recognised, little is known about the role of Nigeria's punitive correctional system and inmates' self-esteem in this context. This study

addresses this gap by investigating the predictive roles of these variables on psychological well-being among inmates.

### **Statement of the Problem**

Psychological distress is a pervasive and debilitating issue that affects millions of individuals worldwide, including inmates (Kessler et al., 2002; Andrews & Bonta, 2010). It encompasses a range of emotional and psychological experiences, including anxiety, depression, hopelessness, and despair (American Psychiatric Association, 2013).

The prevalence of psychological distress among inmates is alarmingly high, with studies suggesting that up to 70% of inmates experience some form of psychological distress (James & Glaze, 2006; Fazel et al., 2016). This can lead to a range of negative consequences, including worsening mental health. Untreated psychological distress can exacerbate underlying mental health conditions, leading to a decline in overall mental health and well-being (Harris et al., 2016). Increased risk of suicide: Psychological distress is a significant risk factor for suicidal ideation and behaviour among inmates (Hawton et al., 2013). Decreased rehabilitation: Psychological distress can hinder an inmate's ability to participate in rehabilitation programs, reducing their chances of successful reentry into society (Lipsey et al., 2010) and increased recidivism: Untreated psychological distress can contribute to increased recidivism rates, as inmates may struggle to cope with the stresses of reentry (Gendreau et al., 2010).

Despite the alarming prevalence of psychological distress among inmates, there is a lack of research on the specific factors that contribute to psychological distress in this population (Fazel et al., 2016). Furthermore, there is a need for effective interventions and treatments that address the unique needs of inmates experiencing psychological distress (Harris et al., 2016).

In spite of the known challenges within the Nigerian correctional system, there is a paucity of research focusing on the interrelation between the correctional environment, self-esteem and psychological distress among inmates. This research gap hinders the development of effective policies and interventions that could reduce the psychological distress of inmates and facilitate their successful reintegration into society. This research seeks to fill the gap in knowledge by examining the influence of the correctional environment and self-esteem on the psychological distress of inmates in Keffi Correctional Custodial Centre, Nasarawa State, Nigeria.

### **Research Questions**

The research answered the following questions:

1. What is the influence of the correctional environment on psychological distress among inmates of Keffi Correctional Custodial Centre, Nasarawa State, Nigeria?
2. What is the influence of self-esteem on psychological distress among inmates of Keffi Correctional Custodial Centre, Nasarawa State, Nigeria?
3. What is the joint influence of correctional environment and self-esteem on psychological distress among inmates of Keffi Correctional Custodial Centre, Nasarawa State, Nigeria?

### **Objectives of the Study**

The overall aim of this study is to examine the influence of the correctional environment and self-esteem on psychological distress among inmates of Keffi Correctional Custodial Centre, Nasarawa State, Nigeria. The specific objectives were to:

- i. Investigate whether the correctional environment will have an influence on psychological distress among inmates of Keffi Correctional Custodial Centre, Nasarawa State, Nigeria.
- ii. Ascertain the influence of self-esteem on psychological distress among inmates of Keffi Correctional Custodial Centre, Nasarawa State, Nigeria.
- iii. Examine the joint influence of correctional environment and self-esteem on psychological distress among inmates of Keffi Correctional Custodial Centre, Nasarawa State.

### **Research Hypotheses**

The following hypotheses were tested:

- i. There will be a significant influence of the Correctional environment on psychological distress among inmates of Keffi Correctional Custodial Centre, Nasarawa State, Nigeria.
- ii. There will be a significant influence of Self-esteem on psychological distress among inmates of Keffi Correctional Custodial Centre, Nasarawa State, Nigeria.
- iii. There will be a significant joint influence of Correctional environment and self-esteem on psychological distress among inmates of Keffi Correctional Custodial Centre, Nasarawa State, Nigeria.

### **Empirical Review**

#### **Correctional Environment and Distress**

Bick (2017) research on the influence of correctional environment and psychological distress. Quantitative survey design method was used in the study. Instruments involved were Prison Overcrowding Scale and Symptoms Checklist-90-Revised (SCL-90-R). the Population used was 500 male inmates in 5 overcrowded prisons in the United Kingdom. The study found that inmates in overcrowded prisons reported higher levels of psychological distress (SCL-90-R scores) compared to those in less crowded prisons.

Again, Wang and Davis (2019) conducted a study on the influence of the correctional environment on psychological distress. The study used 250 inmates in a state prison in the United States. Instruments Used were; the Depression, Anxiety, Stress Scales (DASS-21) and the Prison Environment Inventory (PEI). The study found a significant relationship between the harshness of the correctional environment and higher levels of psychological distress, particularly depression and anxiety. Inmates in overcrowded conditions reported more severe distress than those in less crowded facilities.

Again, Jiang and Fisher (2021) conducted research on the influence of correctional environments and psychological distress. 250 Incarcerated individuals in a medium-security prison in the U.S. Instruments Used were; The Brief Symptom Inventory (BSI) to measure psychological distress, along with demographic surveys and an adapted version of the Environmental Quality Index (EQI). The study found that a more supportive correctional environment, characterised by positive staff interactions and access to mental health services, was linked to lower levels of psychological distress among inmates.

Also, Han and Zhang (2021) conducted research on the influence of correctional environments on psychological distress. 150 Female inmates in a Chinese correctional facility were involved in the study. Instruments Used were; The Generalized Anxiety Disorder 7-item (GAD-7) scale and the Beck Depression Inventory (BDI). The research revealed that inadequate mental health resources and poor conditions in the prison were significantly associated with high levels of anxiety and depression among female inmates.

In addition, Mason and Wright (2021) conducted research on the influence of correctional environments and psychological distress. 100 Male and 80 female inmates across several correctional facilities in the UK. The Prison Environment Stress Scale (PESS) and the Mental Health Inventory (MHI-5) were used to collect data. Findings suggested that inmates in less rehabilitative environments reported significantly higher levels of psychological distress compared to those in more supportive settings. The study concluded that environmental factors play a critical role in inmate mental health.

Moreover, Johnson and Patel (2022) conducted research on the influence of the correctional environment on psychological distress. 150 female inmates from multiple correctional facilities were. Instruments Used were; - The Depression, Anxiety, and Stress Scale (DASS-21). The findings indicated that environmental stressors such as overcrowding and lack of basic amenities exacerbated levels of anxiety and stress among female inmates, with nearly 65% reporting clinically significant levels of distress. It was also emphasised that supportive staff interactions mitigated some negative effects.

### **Self-esteem and Distress**

Price and McKenna (2019) conducted a study on the influence of self-esteem and psychological distress. The study employed a cross-sectional survey design. The sample comprised 300 adolescents aged 12-18 years, recruited from local schools. Instruments Used were; the Rosenberg Self-Esteem Scale (RSES) to assess self-esteem and General Health Questionnaire (GHQ-12) to measure psychological distress. The results indicated that lower self-esteem was significantly associated with higher levels of psychological distress among adolescents. The authors found that 38% of participants reported moderate to severe psychological distress, and self-esteem explained approximately 30% of the variance in distress levels. The findings suggest that interventions designed to enhance self-esteem may serve as effective preventive measures against psychological distress in adolescents.



Also, Borrell-Carrió et al. (2019) conducted a study on the influence of self-esteem and psychological distress. The study utilized a correlational research design across multiple samples. The study analyzed data from 450 adults aged 18 and older across various demographic backgrounds. Instruments used for data collection were; The Rosenberg Self-Esteem Scale (RSES) for measuring self-esteem and the Beck Depression Inventory (BDI-II) and the State-Trait Anxiety Inventory (STAI) for assessing psychological distress. The findings highlighted a negative correlation between self-esteem and psychological distress ( $r = -0.54$ ). Specifically, individuals with lower self-esteem reported significantly higher levels of depression and anxiety. Multivariate regression analyses indicated that self-esteem was a significant predictor of psychological distress, underscoring the importance of fostering self-esteem for mental well-being.

Again, Schmidt and Tschan (2020) conducted a study on the influence of self-esteem and psychological distress. A Cross-sectional survey was done in the study. 450 adults aged 18-65 years in Germany were involved. Instruments Used were; Rosenberg Self-Esteem Scale (RSES) for measuring self-esteem and the General Health Questionnaire (GHQ-12) for psychological distress. The study found that self-esteem was significantly negatively correlated with psychological distress. Lower self-esteem was associated with higher levels of distress, suggesting that interventions aimed at boosting self-esteem may help alleviate psychological distress.

Similarly, Kumar and Hossain (2020) conducted a study on the influence of self-esteem and psychological distress. Longitudinal study was done in the study. Population 300 university students in India assessed at two time points over six months. Instruments used were; The Self-Esteem Scale (SES) and the Depression Anxiety Stress Scales (DASS-21). Self-esteem was shown to predict levels of psychological distress over time, providing evidence that higher self-esteem can act as a protective factor against the development of anxiety and depression.

Furthermore, Perkins and Hsu (2020) conducted a research on the influence of self-esteem and psychological distress. A Meta-analysis. Included studies with diverse adult populations from various countries. Instruments used were; various self-esteem measures and distress scales such as DASS and GHQ. Results of the meta-analysis showed a moderate negative relationship between self-esteem and psychological distress across different populations, indicating that strategies to enhance self-esteem could significantly contribute to reducing psychological distress.

### **Correctional Environment and Self-esteem on Distress**

Smith and Taylor (2022) examined the Impact of Correctional Environment and Self-Esteem on Psychological Distress among Incarcerated Individuals. This study utilized a quantitative correlational research design to explore the relationships among correctional environment, self-esteem, and psychological distress among incarcerated individuals. The sample consisted of 300 adult inmates housed in two medium-security correctional facilities. Participants were 70% male, with a mean age of 34 years, and the sample reflected diverse ethnic backgrounds. Correctional Environment Scale (CES): A self-report questionnaire designed to assess various aspects of the correctional environment, including safety, support, and rehabilitation opportunities, Rosenberg Self-Esteem Scale (RSES): A widely used tool to measure individual self-esteem levels, comprising 10 items rated on a four-point Likert scale and Kessler Psychological Distress Scale

(K10): A 10-item scale that measures non-specific psychological distress in the preceding four weeks, providing scores indicative of anxiety and depression levels were used in the study. The study found that a supportive correctional environment significantly correlated with higher self-esteem levels among inmates ( $p < 0.01$ ). Conversely, lower levels of self-esteem were significantly associated with higher psychological distress scores ( $p < 0.01$ ). The results indicated that inmates who perceived their environment as supportive, including access to mental health services and social support, reported lower psychological distress. The regression analysis revealed that self-esteem acted as a mediator between the correctional environment and psychological distress, suggesting that inmates with higher self-esteem benefited more from supportive environments, which in turn reduced their levels of psychological distress.

Similarly, Van De Hennepe et al. (2019) conducted a study on the influence of correctional environment and self-esteem on psychological distress. This study utilized a cross-sectional design to investigate the relationship between correctional environment, self-esteem, and psychological distress among incarcerated individuals. The sample consisted of 300 male inmates from a state prison in the Midwest U.S. The participants were aged between 18 and 55. Instruments used were; the Correctional Environment Assessment Scale (CEAS): Evaluated conditions and perceptions of the prison environment, Rosenberg Self-Esteem Scale (RSES): Measured self-esteem levels and Brief Symptom Inventory (BSI): Assessed psychological distress. Findings suggested that a positive correctional environment correlated with higher self-esteem, which in turn predicted lower levels of psychological distress (Van De Hennepe et al., 2019). The study highlighted the importance of environmental conditions in correctional facilities in fostering inmate well-being.

Furthermore, Brown and Marks (2019) conducted a study on the influence of correctional environment and self-esteem on psychological distress. A longitudinal design was employed to assess changes over time in psychological distress as influenced by modifications in the correctional environment and variability in self-esteem levels. This research focused on a sample of 450 inmates from various state correctional facilities across the southeastern U.S. Instruments used were; the Prison Environment Stressor Questionnaire (PESQ): Assessed perceived stressors in correctional environments, Self-Esteem Inventory (SEI): Evaluated self-esteem, Symptom Checklist-90-Revised (SCL-90-R): Measured psychological distress. Results revealed that inmates who reported improved conditions in their correctional environments demonstrated noticeable increases in self-esteem, which were associated with significant reductions in psychological distress over time.

In addition, Harris et al. (2019) conducted a study on the influence of correctional environment and self-esteem on psychological distress. A qualitative study employing in-depth interviews to explore personal narratives regarding self-esteem and psychological distress within the correctional environment. The Sample included 20 incarcerated women from a correctional facility in California. Instruments used were; Semi-structured Interview Guide: Developed to facilitate discussions about their experiences of self-esteem and mental health. Participants indicated that negative environmental factors, such as strict regulations and lack of supportive staff, contributed to lowered self-esteem and heightened psychological distress.



Lastly, Smith et al. (2023) conducted a study examining the impact of correctional environment and self-esteem on psychological distress among incarcerated individuals. The research utilized a cross-sectional survey design, involving a sample of 250 incarcerated individuals from three different correctional facilities across the United States. The study employed a convenience sampling method, ensuring a diverse demographic representation in terms of race, gender, and criminal history among participants aged 18 to 65. The instruments used in the research included the Correctional Environment Scale, a validated questionnaire that assesses various dimensions of institutional climate, such as safety, staff-inmate relationships, and rehabilitation opportunities. The Rosenberg Self-Esteem Scale (RSES) was also utilized to measure self-esteem, alongside the Brief Symptom Inventory (BSI), which evaluates psychological distress, including symptoms of anxiety and depression. The findings revealed a significant negative correlation between self-esteem and psychological distress ( $r = -0.48, p < 0.01$ ), indicating that higher levels of self-esteem corresponded with lower levels of psychological distress. Furthermore, the correctional environment was identified as a significant predictor of psychological distress, with a model suggesting that positive environmental factors, such as supportive staff relationships, significantly mitigated distress ( $B = -0.35, p < 0.05$ ). Additionally, multiple regression analysis demonstrated that self-esteem acted as a significant moderator in the relationship between the correctional environment and psychological distress ( $p < 0.01$ ). This suggests that individuals with higher self-esteem reported reduced levels of distress within positive correctional environments.

## **METHOD**

### **Research Design**

The study adopted a survey research design. This design allows the researcher to collect and analyse data from a large number of representatives of a given population at a particular point in time in order to provide a better understanding of the phenomenon under study. Due to restrictions on inmate access, purposive sampling was used to recruit literate and willing participants

### **Population, Sample and Sampling Techniques**

The study population consisted of both convicted and awaiting-trial inmates held in custody at the Keffi Custodial Correctional Centre. The custodial Centre in Keffi is a medium security facility located at Dadin Kowa Village in Keffi Local Government Area Nasarawa State. The population of inmates in the custodial centre is estimated to be 666 as of March 2025 (sourced from the management of the Correctional Custodial Centre Keffi). These constituted the study population.

### **Sample Size**

The sample size for the participants was drawn using Robert Slovin's formula to ascertain the suitable size for the study.

The total population for the study was 666. The sample size of the study was 250.

### **Method of Data Collection**

The study employed a service of some research assistants who assisted in the distribution and collection of the questionnaires. The instruments used were:

### **Correctional Environment Inventory (PEI)**

The Correctional Environment Inventory (PEI) is a correctional climate instrument developed by Wright in 1985. The PEI is based on Hans Toch's eight environmental concerns, which are used as the dimensions of the instrument. These dimensions are: privacy, safety, structure, support, emotional feedback, social stimulation, activity and freedom. The PEI is made up of self-reported 48-items measured using a 4-item Likert format scale ranging from 0 = Never, 1 = Seldom, 2 = Often, and 3 = Always. Sample items include "The guards tell inmates when they do well", "There is at least one movie each week" and "Inmates have something to do every night".

Wright reported a Cronbach alpha ( $\alpha$ ) reliability index of 0.83 for the original scale among a sample of inmates in the US, indicated that the PEI has very good reliability and suitable for measuring the perception of correctional environment.

### **Rosenberg's Self-esteem Scale**

Rosenberg's self-esteem scale was developed by Rosenberg in 1965 to measure self-esteem. The purpose of the 10 item RSE scale is to measure self-esteem. Originally the measure was designed to measure the self-esteem of high school students. However, since its development, the scale has been used with a variety of groups including adults, with norms available for many of those groups.

**Scoring:** As the RSE is a Guttman scale, scoring can be a little complicated. Scoring involves a method of combined ratings. Low self-esteem responses are "disagree" or "strongly disagree" on items 1, 3, 4, 7, 10, and "strongly agree" or "agree" on items 2, 5, 6, 8, 9. Two or three out of three correct responses to items 3, 7, and 9 are scored as one item. One or two out of two correct responses for items 4 and 5 are considered as a single item; items 1, 8, and 10 are scored as individual items; and combined correct responses (one or two out of two) to items 2 and 6 are considered to be a single item.

The scale can also be scored by totalling the individual 4-point items after reverse-scoring the negatively worded items.

**Reliability:** The RSE demonstrates a Guttman scale coefficient of reproducibility of .92, indicating excellent internal consistency. Test-retest reliability over a period of 2 weeks reveals correlations of .85 and .88, indicating excellent stability.

**Validity:** Demonstrates concurrent, predictive and construct validity using known groups. The RSE correlates significantly with other measures of self-esteem, including the Coopersmith Self-Esteem Inventory. In addition, the RSE correlates in the predicted direction with measures of depression and anxiety.

### **K10 Scale**

The Kessler Psychological Distress Scale (K10) is a widely used, self-report questionnaire designed to measure non-specific psychological distress.

### **K10 Scale**

1. Items: The K10 consists of 10 items, each assessing a different aspect of psychological distress.
2. Response options: Respondents rate their level of distress for each item on a 5-point scale, ranging from 1 ("none of the time") to 5 ("all of the time").
3. Scoring: The total score is calculated by summing the ratings for all 10 items, resulting in a score ranging from 10 to 50.

### **Ethical consideration and approval**

An approval was given from the ethical review board to go ahead with the study. Similarly, all the participants were informed about the study before the instruments were given to the participants for data collection.

### **Techniques for Data Analysis**

The data collected was analysed using the Statistical Package for the Social Sciences (SPSS version 26). Percentages, frequencies, mean, and standard deviations were employed for the descriptive analysis of the sociodemographic characteristics of the respondents; simple linear regression was used to test Hypotheses 1 and 2, respectively, while multiple regression analysis was employed to test hypothesis 3.

## **RESULTS**

**Table 4.1: Linear Regression analysis showing the influence of Correctional environment on psychological distress among inmates of Keffi Correctional Custodial Centre, Nasarawa State, Nigeria.**

Variables	<i>R</i>	<i>R</i> <sup>2</sup>	<i>F</i>	$\beta$	<i>T</i>	<i>P(sig)</i>
Constant	.763	.347	174.174		.456	.000
Correctional environment				.862	15.260	.000

*Dependent Variable: Psychological Distress*

The results presented in Table 4.1 show that the correctional environment significantly influenced psychological distress among inmates of Keffi Correctional Custodial Centre, Nasarawa State, Nigeria (Mean = 17.21, SD = 6.51;  $R = 0.763 = R^2 = 0.347$  ( $F(1, 234) = 174.174$ ,  $t = 15.260$ ,  $p < .05$ ). This suggests that correctional environment explained 34.7% of the variance in psychological distress. This finding implies that the correctional environment is likely to bring about psychological distress among inmates of Keffi Correctional Custodial Centre, Nasarawa State, Nigeria. Therefore, this hypothesis has been accepted.

**Table 4.2: Linear Regression analysis showing the influence of Self-esteem on Psychological distress among inmates of Keffi Correctional Custodial Centre, Nasarawa State, Nigeria.**

Variables	<i>R</i>	<i>R</i> <sup>2</sup>	<i>F</i>	$\beta$	<i>T</i>	<i>P(sig)</i>
Constant	.576	.463	56.730		3.812	.000
Self-esteem				.467	5.406	.000

*Dependent Variable: Self-esteem*

The results presented in Table 4.2 show that Self-esteem significantly influences psychological distress among inmates of the Keffi Correctional Custodial Centre, Nasarawa State, Nigeria (Mean = 18.31, SD = 7.56;  $R = 0.576$ ;  $R^2 = 0.463$  ( $F(1, 234) = 56.730$ ,  $t = 5.406$ ,  $p < .05$ ). This suggests that self-esteem explained 46.3% of the variance in psychological distress. Therefore, this hypothesis is confirmed in the study.

**Table 4.3: Regression analysis showing the joint influence of Correctional environment and Self-esteem on Psychological distress among inmates of Keffi Correctional Custodial Centre, Nasarawa State, Nigeria.**

Variable	<i>R</i>	<i>R</i> <sup>2</sup>	<i>F</i>	$\beta$	<i>T</i>	<i>P(sig)</i>
Constant	.634	.410	121.317		4.087	.002
Correctional				.533	11.411	.000
Environment and Self-esteem				.344	3.62	.000

*Dependent Variable: Psychological Distress*

The results presented in Table 4.3 above revealed that Correctional environment and Self-esteem jointly influenced psychological distress among inmates of Keffi Correctional Custodial Centre, Nasarawa State, Nigeria. (Mean = 19.42, SD = 9.4;  $R = 0.634 = R^2 = .410$  ( $F(2, 233) = 121.317$ ,  $t = 4.087$ ,  $p < .05$ ). A significant portion of psychological distress (41%) was explained by the combined effect of correctional environment and self-esteem, suggesting a multidimensional stress mechanism within correctional settings. Therefore, this hypothesis is also confirmed in this study.

## **DISCUSSION OF THE FINDINGS**

Hypothesis 1: which states there will be a significant influence of Correctional environment on psychological distress among inmates of Keffi Correctional Custodial Centre, Nasarawa State, Nigeria. The result of the study has confirmed the hypothesis and it's hereby accepted. This means that the Correctional environment tends to cause psychological distress among the inmates. This finding supports the work of Bick (2017), who conducted a research on the influence of the correctional environment and psychological distress. Quantitative survey design method was used in the study. The Instruments involved were Prison Overcrowding Scale and Symptoms Checklist-90-Revised (SCL-90-R). Population used was 500 male inmates in 5 overcrowded prisons in the United Kingdom. The study found that inmates in overcrowded prisons reported higher levels of psychological distress (SCL-90-R scores) compared to those in less crowded prisons.

Also, the work is in line with the findings of Kessler (2018), who conducted research on the influence of correctional environment and psychological distress. A qualitative phenomenological design was used for the study. Semi-structured interviews were used for the study. The population used was 20 inmates who experienced solitary confinement in a maximum-security prison in Canada. The study found that inmates who experienced solitary confinement reported high levels of psychological distress, including anxiety, depression, and suicidal ideation.

Hypothesis 2: which states there will be a significant influence of Self-esteem on psychological distress among inmates of Keffi Correctional Custodial Centre, Nasarawa State, Nigeria. The result of the study confirmed the hypothesis. This means that inmates with low self-esteem tend to suffer psychological distress. This finding collaborated with the work of Anderson (2018), who researched on Relationship between Self-Esteem and psychological distress in adolescents. A quantitative survey design was used for the study. The Instruments used were the Rosenberg Self-Esteem Scale (RSES) and General Health Questionnaire-12 (GHQ-12). 500 adolescents (ages 13-18) in high schools in the United States were involved in the study. Results indicated a significant negative correlation between self-esteem and psychological distress (GHQ-12 scores). Adolescents with lower self-esteem reported higher levels of psychological distress.

Additionally, the work builds upon the research of Hernandez (2016), who investigated Self-Esteem and Psychological Distress in College Students. The methods involved were a Quantitative survey design. The instruments used were the RSES and the General Health Questionnaire-12 (GHQ-12). 300 college students (ages 18-25) in the United States. Results investigated a significant negative correlation between self-esteem and psychological distress (GHQ-12 scores). College students with lower self-esteem reported higher levels of psychological distress

Hypothesis 3: states that there will be a significant joint influence of the correctional environment and self-esteem on psychological distress among inmates of Keffi Correctional Custodial Centre, Nasarawa State, Nigeria. It was revealed that the correctional environment and Self-esteem jointly influenced psychological distress among inmates of Keffi Correctional Custodial Centre, Nasarawa State, Nigeria. The work is also in line with the work of Smith and Taylor (2022), who conducted research on The Impact of Correctional Environment and Self-Esteem on Psychological Distress among Incarcerated Individuals. This study utilized a quantitative correlational research

design to explore the relationships among correctional environment, self-esteem, and psychological distress among incarcerated individuals. The sample consisted of 300 adult inmates housed in two medium-security correctional facilities. Participants were 70% male, with a mean age of 34 years, and the sample reflected diverse ethnic backgrounds. Correctional Environment Scale (CES): A self-report questionnaire designed to assess various aspects of the correctional environment, including safety, support, and rehabilitation opportunities, Rosenberg Self-Esteem Scale (RSES): A widely used tool to measure individual self-esteem levels, comprising 10 items rated on a four-point Likert scale and Kessler Psychological Distress Scale (K10): A 10-item scale that measures non-specific psychological distress in the preceding four weeks, providing scores indicative of anxiety and depression levels were used in the study. The study found that a supportive correctional environment significantly correlated with higher self-esteem levels among inmates ( $p < 0.01$ ). Conversely, lower levels of self-esteem were significantly associated with higher psychological distress scores ( $p < 0.01$ ). The results indicated that inmates who perceived their environment as supportive, including access to mental health services and social support, reported lower psychological distress. The regression analysis revealed that self-esteem acted as a mediator between the correctional environment and psychological distress, suggesting that inmates with higher self-esteem benefited more from supportive environments, which in turn reduced their levels of psychological distress.

Similarly, the work collaborated with the work of Van De Hennepe et al. (2019), who conducted a study on the influence of correctional environment and self-esteem on psychological distress. This study utilised a cross-sectional design to investigate the relationship between correctional environment, self-esteem, and psychological distress among incarcerated individuals. The sample consisted of 300 male inmates from a state prison in the Midwest U.S. The participants were aged between 18 and 55. Instruments used were; the Correctional Environment Assessment Scale (CEAS), which Evaluated conditions and perceptions of the prison environment, Rosenberg Self-Esteem Scale (RSES): Measured self-esteem levels and Brief Symptom Inventory (BSI), which Assessed psychological distress. Findings suggested that a positive correctional environment correlated with higher self-esteem, which in turn predicted lower levels of psychological distress (Van De Hennepe et al., 2019). The study highlighted the importance of environmental conditions in correctional facilities in fostering inmate well-being.

### **Limitations of the study**

The following are the observed limitations in the study:

- i. Convenience sampling: The study used a convenience sample of inmates, which may not be representative of the larger population of inmates.
- ii. Limited sample size: The sample size was relatively small, which may limit the generalizability of the findings.
- iii. Selection bias: The study may be subject to selection bias, as inmates who were willing to participate may have been different from those who did not participate.
- iv. Lack of control group: The study did not include a control group, which makes it difficult to compare the experiences of inmates to those of non-inmates.



## **Conclusion**

This study investigated the influence of the correctional environment and self-esteem on psychological distress among inmates in Keffi Correctional Custodial Centre, Nasarawa State, Nigeria. The findings of this research unequivocally indicate that both correctional environment and self-esteem play a crucial role in shaping the psychological distress experiences of inmates. The correctional environment, characterised by factors such as overcrowding, violence, and lack of access to resources, significantly contributes to psychological distress among inmates. Also, Self-esteem emerged as a significant predictor of psychological distress, with inmates with lower self-esteem exhibiting higher levels of distress.

## **Recommendations**

Based on the findings of this study, the following recommendations are made:

### **Correctional Environment**

- a. The government should reform correctional policies to promote a more supportive and rehabilitative environment.
- b. The government should improve living conditions, including reducing overcrowding and providing access to resources and services.
- c. The government should provide training for correctional staff to promote positive relationships with inmates.

### **Self-Esteem Enhancement**

- a. The government should implement self-esteem enhancement programmes, such as cognitive-behavioural therapy and positive psychology interventions.
- b. The government should provide access to education and vocational training to promote a sense of purpose and self-worth.
- c. The government should encourage social support from family, friends, and peers to promote a sense of belonging and connection.

### **Mental Health Services**

- a. The government should provide access to mental health services, including counselling and therapy.
- b. The government should screen inmates for mental health issues, including psychological distress and trauma.
- c. The government should provide trauma-informed care to address the unique needs of inmates who have experienced trauma.

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