



Depression, Anxiety, and Resilience in Female Prisoners: A Psychological Perspective

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Abstract: This study explored the prevalence and interplay of depression, anxiety, and resilience among incarcerated women. Results indicated that nearly 60% experienced moderate-to-severe depression, while more than 70% reported moderate-to-severe anxiety. A strong correlation was observed between the two conditions, with anxiety serving as a significant predictor of depression. Conversely, resilience functioned as a protective factor, showing negative associations with both depression and anxiety and predicting lower depression scores. The findings emphasize the importance of integrated approaches to assessment and treatment that address co-occurring symptoms while fostering resilience. Policy recommendations include routine screening at intake and throughout incarceration, alongside evidence-based psychosocial interventions such as trauma-informed care, cognitive-behavioral therapy, and resilience training. System-level supports—including peer networks, family contact, and continuity of care—are also critical. Limitations include the cross-sectional design, reliance on self-report measures, and single-site sampling. Future research should employ longitudinal and intervention designs, investigate moderators and mediators, and validate screening tools within correctional populations. A strengths-based, comprehensive model of care is essential to enhance wellbeing, reduce recidivism, and support reintegration.

Keywords: Female Prisoners, Incarceration, Depression, Anxiety, Mental Health, Resilience.

1. INTRODUCTION

The psychological well-being of female prisoners has become an increasingly important area of research, given the unique challenges they face within correctional environments. Incarceration often entails separation from family, social stigma, restricted autonomy, and exposure to institutional stressors, all of which contribute to heightened vulnerability to mental health issues. Among these, depression and anxiety are particularly prevalent, manifesting as emotional distress, hopelessness, and heightened fear or worry. These conditions not only affect the individual's mental health but also hinder rehabilitation and reintegration into society.

The capacity to adapt positively in the face of adversity emerges as a critical protective factor. Resilient female prisoners are better able to cope with the psychological demands of imprisonment, maintain emotional stability, and engage constructively in rehabilitation programs. Understanding the interplay between depression, anxiety, and resilience provides a holistic psychological perspective on female prisoners, highlighting both their vulnerabilities and strengths.

Addressing the mental health needs of female prisoners through targeted interventions can significantly enhance their resilience and overall quality of life, ultimately aiding in their successful reintegration into society. By fostering resilience, we can empower these women to navigate their challenges more effectively, thus reducing the prevalence of depression and anxiety (Pertiwi & Kaloeti, 2021).

2. Review of Literature

The mental health of female prisoners is a major concern, with studies showing far higher rates of depression and anxiety than men in custody or women in the community. Harlow (2003) found 73% reported depression and 65% anxiety, underscoring the urgent need for gender-responsive interventions that address their unique vulnerabilities and build resilience for rehabilitation. Research shows female prisoners face high rates of depression and anxiety, largely due to



trauma and incarceration stressors. Browne et al. (1999) found 86% had experienced trauma, strongly linked to mental health issues. Loss of family ties, stigmatization, and confinement further intensify distress (Dumont et al., 2012), underscoring the need for trauma-informed, gender-sensitive interventions in correctional settings. A systematic review of qualitative literature by Bright, Higgins, and Grealish (2022) found that female inmates frequently report unmet mental health needs, with prison environments often failing to provide adequate psychological support. The review emphasized that women's experiences of prison-based mental healthcare are shaped by trauma histories and institutional stressors, making them particularly susceptible to depression and anxiety.

Further, Carei et al. (2024) explored women's pathways through prison, emphasizing the roles of trauma, addiction, and mental health. Their work underscored that resilience is not merely an individual trait but is influenced by institutional support, social connections, and access to rehabilitative programs. Given this high prevalence of trauma, there is a pressing need for comprehensive mental health care in correctional settings—approaches that not only treat symptoms but also incorporate resilience-building strategies to help mitigate the impacts of depression and anxiety and support rehabilitation (Andriany & Cahyani, 2022). By focusing on internal factors such as coping skills and social support, we can enhance the psychological well-being of this vulnerable population (Sygit-Kowalkowska et al., 2017).

Similarly, Hidayati et al. (2023) conducted a scoping review of correctional-based interventions for women prisoners with mental health problems. Their findings revealed that while some interventions such as counselling, group therapy, and resilience-building programs—show promise, there remains a lack of comprehensive, gender-sensitive approaches tailored to the unique needs of female inmates.

3. Importance of study

Studying female prisoners' mental health is vital to address a major public health and social justice issue. They face disproportionately high rates of depression, anxiety and trauma, compounded by abuse histories, socioeconomic disadvantage, stigmatization and family disruption. Without targeted care, these problems hinder rehabilitation and increase recidivism. Yet, their resilience offers opportunities for recovery and reintegration. Research is essential to develop gender-responsive, trauma-informed, resilience-building strategies that improve well-being and correctional outcomes.

4. Methodology

Sample

- **Population:** Female prisoners in correctional facilities in Nizamabad district, Telangana.
- **Sample Size:** 167 participants were included in the present study depending on accessibility and consent.
- **Sampling Technique:** Purposive sampling technique was used to ensure inclusion of women offenders across different age groups, sentence durations, and backgrounds.

Inclusion Criteria:

- Adult female prisoners who are above the age of 18 years
- Adult female prisoners incarcerated for at least three months.
- Women offenders who are willing to participate voluntarily.

Exclusion Criteria:

- Prisoners with severe cognitive impairments
- Those who are unable to provide informed consent.

Tools

Demographic Data Sheet: Researcher developed to collect background information of participant such as age and duration of imprisonment.

Beck Depression Inventory-II: The Beck Depression Inventory-II (BDI-II), developed by Aaron T. Beck et al. in 1996, is a 21-item self-report scale aligned with DSM-IV criteria to measure depressive symptoms. Items are rated on a 0–3 Likert scale, yielding scores from 0–63, categorized as minimal, mild, moderate, or severe depression. It demonstrates



strong psychometric properties, with Cronbach’s alpha 0.86–0.93 and test–retest reliability 0.73–0.96, alongside high sensitivity and specificity. Widely validated across populations, the BDI-II is a reliable tool for clinical and research use.

Generalized Anxiety Disorder Scale: The Generalized Anxiety Disorder Scale (GAD-7), developed in 2006 by Robert L. Spitzer, Janet B.W. Williams, Kurt Kroenke, and Bernd Löwe, is a 7-item self-report tool measuring anxiety severity. Items are rated on a 4-point Likert scale (not at all to nearly every day), covering symptoms like worry, nervousness, restlessness, and difficulty relaxing. Scores range from 0–21, with thresholds for mild (5–9), moderate (10–14), and severe (15–21) anxiety. The scale shows high internal consistency (Cronbach’s alpha > 0.85) and strong validity, making it reliable for screening, diagnosis, and monitoring across diverse populations and languages.

Connor-Davidson Resilience Scale (CD-RISC): The Connor-Davidson Resilience Scale (CD-RISC), developed in 2003 by Kathryn M. Connor and Jonathan R.T. Davidson, is a 28-item measure of resilience. It assesses four dimensions which are personal competence, social resources, structured style and family cohesion. With Cronbach’s alpha values above 0.80 in adolescent samples, the scale demonstrates strong reliability and is widely recognized as a robust tool for evaluating resilience across diverse populations, including female prisoners.

Statistical analysis: Descriptive statistics as mean scores and Standard Deviations were calculated to determine prevalence of depression and anxiety. Inferential statistics such as Pearson Correlation and regression analyses were carried out to examine relationships between depression, anxiety and resilience.

Ethical considerations:

- Respect for participants’ dignity and autonomy was maintained.
- Voluntary participation was encouraged with the right to withdraw at any time.
- Psychological support was offered for participants showing severe distress.

Results

Table-1: Demographic Data of Participants (N = 167).

Variable	Category	Frequency (n)	Percentage (%)
Age (years)	18–25	42	25.1%
	26–35	58	34.7%
	36–45	39	23.4%
	46 and above	28	16.8%
Duration of Imprisonment	Less than 1 year	47	28.1%
	1–3 years	61	36.5%
	4–6 years	38	22.8%
	More than 6 years	21	12.6%

Table-1 showing the data that most participants were young adults, mainly 26–35 years (34.7%) and 18–25 years (25.1%), highlighting incarceration during key social responsibility years. Most served 1–3 years (36.5%) or less than a year (28.1%), with fewer in longer terms. This indicates short- to medium-term sentences dominate, emphasizing the need for early, targeted mental health support.

Table-2: Descriptive Statistics of Depression, Anxiety, and Resilience (N = 167)

Variable	Mean (M)	Standard Deviation (SD)
Depression (BDI-II)	24.6	8.9
Anxiety (GAD-7)	12.3	4.7

Table-2 demonstrating the descriptive statistics, which show that the mean depression score (BDI-II) among female prisoners was 24.6 (SD = 8.9), placing the average participant in the moderate depression range. The mean anxiety score (GAD-7) was 12.3 (SD = 4.7), which corresponds to moderate anxiety. These results indicate that, on average, the



women in this study experienced clinically significant levels of both depression and anxiety, underscoring the urgent need for targeted psychological interventions within correctional settings.

Table-3: Prevalence Categories of Depression (BDI-II)

Category	Score Range	Frequency (n)	Percentage (%)
Minimal	0–13	28	16.8%
Mild	14–19	39	23.4%
Moderate	20–28	57	34.1%
Severe	29–63	43	25.7%

Table-3 showing that out of 167 female prisoners, 16.8% had minimal depression, 23.4% mild, 34.1% moderate, and 25.7% severe. Over half (59.8%) fell in the moderate-to-severe range, showing a high burden of clinically significant depression and the need for targeted interventions.

Table-4: Prevalence Categories of Anxiety (GAD-7)

Category	Score Range	Frequency (n)	Percentage (%)
Mild	5–9	46	27.5%
Moderate	10–14	71	42.5%
Severe	15–21	50	30.0%

Table-4 showing that among 167 female prisoners, 27.5% had mild anxiety, 42.5% moderate, and 30% severe. Most experienced moderate to severe anxiety, underscoring a significant mental health burden and the need for targeted, gender-sensitive interventions.

Table-5: Correlation Matrix (Pearson’s r)

Variables	Depression (BDI-II)	Anxiety (GAD-7)	Resilience (CD-RISC)
Depression	1.00	0.68**	-0.52**
Anxiety	0.68**	1.00	-0.47**
Resilience	-0.52**	-0.47**	1.00

Table-5 showing that depression and anxiety were strongly correlated ($r = 0.68, p < 0.01$), while resilience was negatively correlated with both depression ($r = -0.52, p < 0.01$) and anxiety ($r = -0.47, p < 0.01$). Higher resilience reduced psychological distress, underscoring its protective role in female prisoners.

Table-6: Regression Analysis Predicting Depression

Predictor	β (Beta)	t-value	p-value
Anxiety (GAD-7)	0.54	9.21	
Resilience (CD-RISC)	-0.38	-6.74	

Table-6 showing that anxiety significantly predicted higher depression ($\beta = 0.54, t = 9.21, p < 0.001$), while resilience predicted lower depression ($\beta = -0.38, t = -6.74, p < 0.001$), showing anxiety worsens distress and resilience protects against it.

5. Discussion

The present study examined the prevalence of depression and anxiety, as well as the protective role of resilience, among 167 female prisoners. Incarcerated women show disproportionately high depression and anxiety, with over two-thirds meeting criteria for mental disorders (excluding substance use), confirming a pervasive prison mental health crisis (1). The current study’s finding that 59.8% of participants experienced moderate-to-severe depression is consistent with international evidence. For example, a Brazilian study using the PHQ-4 reported 65.7% prevalence of depression and 75.8% anxiety among incarcerated women, reinforcing the global pattern of high psychological morbidity in prison



populations [2]. Figures from this study are remarkably similar to those observed internationally. For example, research in Latin American correctional facilities has consistently documented high rates of depressive and anxiety symptoms among female prisoners, though prevalence estimates vary depending on instruments and sample characteristics [3][4]. These convergent findings across diverse cultural and geographic contexts reinforce that the mental health burden among incarcerated women is a global phenomenon, demanding urgent attention and coordinated interventions. While the current investigation and several Latin American reports document high prevalence of depression and anxiety among incarcerated women, some site-specific findings show lower estimates. For example, a small West African sample reported 31% depression and 15% anxiety [5].

Multiple prison studies show depression and anxiety co-occur in incarcerated women, with strong associations [2][7], underscoring the need for integrated interventions. This high comorbidity shows shared mechanisms and risk factors the regression showed anxiety significantly predicted higher depression, supporting models where anxiety and arousal worsen mood and impairment [9]. Resilience showed a protective effect, negatively correlating with depression and anxiety. This supports evidence that resilience traits—adaptability, optimism, coping—reduce internalizing symptoms in incarcerated women [12], highlighting resilience-building as a key intervention target. Research consistently shows that social support, coping skills, self-esteem, and adaptive emotion regulation are key correlates of resilience in incarcerated women. These factors predict stronger resilience and, in turn, better mental health outcomes, helping buffer against depression and anxiety [14][15]. This highlights the importance of interventions that foster supportive relationships, build coping strategies, and strengthen self-worth to enhance psychological well-being in prison settings.

6. Limitations of the study

In this study, a couple of limitations exist. First, the cross-sectional design prevents causal inference; longitudinal studies are needed to clarify directionality among anxiety, depression, and resilience. Second, reliance on self-report introduces bias from social desirability and recall. Future work should use multi-method approaches to improve validity. Third, the sample was drawn from a single correctional facility, limiting generalizability to other prison populations or regions. Fourth, key contextual variables—such as incarceration length, offense type, trauma history, substance use, and access to mental health services—were not assessed, though they may moderate the observed relationships. Finally, while instruments like the GAD-7 have been applied in prison settings, the absence of published validation studies for the BDI-II in correctional populations highlights the need for further psychometric research to ensure measurement accuracy in these contexts.

7. Future research

Future research should use longitudinal designs to clarify causal pathways and intervention timing, conduct randomized trials of resilience-based, trauma-informed, and cognitive-behavioral programs, examine moderators such as trauma, social support, coping, and institutional factors, employ qualitative methods to capture lived experiences and preferences, and pursue health services research to assess implementation, cost-effectiveness, and sustainability of prison mental health interventions.

8. Conclusion

This study documented strikingly high rates of psychological distress among incarcerated women, with nearly 60% experiencing moderate-to-severe depression and over 70% reporting moderate-to-severe anxiety. The strong positive correlation between these conditions, alongside regression findings showing that anxiety significantly predicts higher depression, underscores the interwoven nature of internalizing symptoms in correctional populations. Importantly, resilience emerged as a significant protective factor, inversely associated with both depression and anxiety and predictive of lower depression scores, highlighting its potential as a buffer against psychological morbidity in prison environments.

Correctional mental health care should integrate routine screening, evidence-based psychosocial interventions, and resilience-building tailored to women's unique needs. System-level supports—such as peer networks, family contact,



and continuity of care—are equally vital. A comprehensive, strengths-based approach can improve wellbeing, reduce recidivism, and support successful reintegration, advancing both public health and safety.

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