

Psychosocial Factors as Predictors of Relapse Rate Among Substance Use Disorders Patients in A Mental Health Facility in Nigeria

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Abstract: Substance Use Disorders (SUDs) remain a significant global public health concern, with high relapse rates posing substantial challenges to treatment outcomes. This study examines psychosocial factors, loneliness, perceived stigmatization, and perceived social support as predictors of relapse among SUD patients in Nigeria. Utilizing an ex post facto research design, data were collected from 500 SUD patients through validated instruments measuring loneliness, stigmatization, and social support. The results indicated that loneliness and perceived stigmatization significantly predicted higher relapse rates, aligning with previous research that links these factors to reduced motivation and coping ability. Conversely, perceived social support was found to significantly predict lower relapse rates, highlighting its protective role in fostering recovery. Furthermore, a multiple regression analysis revealed that loneliness, perceived stigmatization, and social support jointly accounted for a significant proportion of the variance in relapse rates among SUD patients. These findings underscore the critical importance of addressing psychosocial factors in SUD treatment programs. Integrating interventions to reduce loneliness and stigma while enhancing social support can significantly improve recovery outcomes. Implications for clinical practice and recommendations for future research are discussed, emphasizing the need for multi-site studies and longitudinal designs to generalize and validate these findings further.

Keywords: Substance Use Disorder, Relapse, Loneliness, Perceived Stigma, Perceived Social Support.

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I. INTRODUCTION

Substance Use Disorders (SUDs) continue to present a profound challenge globally, not only due to the physiological dependency they foster but also because of the intense psychosocial consequences that often determine recovery trajectories (Edwards et al., 2017; Lang & Rosenberg, 2017). In the context of mental health, SUDs are arguably the most stigmatized conditions, often eclipsing even severe mood or psychotic disorders in the degree of social rejection and moral judgment they provoke. Patients battling SUDs are frequently perceived through a lens of blame and suspicion, seen as irresponsible, dangerous, or socially burdensome (Winters & Harris, 2020). This negative social perception creates a deeply entrenched stigma that not only isolates individuals but can undermine recovery efforts by weakening access to care, eroding self-worth, and triggering a cycle of relapse.

This layered form of stigmatization plays a central barrier to sustained recovery, laying the groundwork for a deeper exploration into the psychosocial underpinnings of relapse behavior.

In recent years, researchers and clinicians have turned to psychosocial variables to better understand and address the high rates of relapse among SUD patients. This study identifies three psychosocial constructs as central to this issue: loneliness, perceived stigmatization, and perceived social support. These factors, though distinct, interact in ways that can either amplify vulnerability or foster resilience in the face of addiction. Loneliness, for instance, is more than just the absence of company; it is a chronic state of perceived social disconnection that can breed despair and emotional pain. Empirical research has demonstrated that loneliness can heighten stress reactivity, distort cognitive processing, and

reduce the efficacy of healthy coping mechanisms (Gutkind, et al., 2021; Ingram, et al., 2020). For individuals with SUDs, these psychological distortions can increase the allure of substance use as a form of emotional escape or numbing. The experience of being socially isolated, whether physically or emotionally, may exacerbate cravings or contribute to the breakdown of treatment adherence, thus significantly elevating the likelihood of relapse.

Perceived stigmatization is another deeply disruptive force in the recovery journey. Unlike objective stigma, which may manifest in overt discrimination, perceived stigma refers to the internalized sense that others judge or devalue one's character based on their substance use history (Earnshaw, 2020). This perception can be just as damaging as actual experiences of stigma because it shapes self-concept, leads to shame and hopelessness, and discourages openness in therapeutic contexts (Kulesza, 2014). Krendl & Perry (2023) have shown that individuals who feel stigmatized are less likely to seek help, less likely to engage with supportive communities, and more likely to retreat into secrecy or relapse under stress. In the Nigerian context, where traditional views of morality and social roles may intensify these judgments, the psychological toll of perceived stigmatization could be even more severe.

In contrast, perceived social support serves as a powerful counterbalance to these risks. Social support refers to the subjective belief that one is cared for, valued, and has access to a responsive social network. It provides emotional, informational, and practical resources that can buffer stress, reinforce treatment goals, and promote a sense of belonging. Studies have consistently supported its role as a protective factor against relapse (Warren et al., 2007; Nikmanesh et al., 2016). Support from family, friends, or peer recovery groups can help SUD patients feel accountable, hopeful, and motivated to remain abstinent. Unfortunately, the studies have noted that not everyone receives or recognizes the social support available to them. Cultural dynamics, past traumas, or the presence of stigma within family systems may interfere with support utilization.

The psychosocial dimension of relapse is often overlooked in favor of biological or pharmacological models of addiction treatment. Yet it is precisely these subjective experiences, such as loneliness, stigma, and support, that mediate how a patient copes with cravings, stressors, and the emotional labor of recovery (Brown & Bruce, 2016). This study invites a more holistic approach to treatment, one that incorporates the relational and psychological ecosystem of the individual alongside their clinical profile (Birtel et al., 2017). This study further strengthens the articulation of clear research objectives and hypotheses; each aligned with one of the psychosocial factors. This structured approach allows for a systematic exploration of how each variable independently and collectively predicts relapse outcomes. The section closes with a call to address stigma reduction and to foster meaningful social support as a strategy to combat relapse, particularly important in low-resource or culturally conservative settings such as the one studied here.

II. LONELINESS AND RELAPSE

Loneliness is understood as a subjective experience of isolation or disconnection from others. While it may or may not correlate with actual social contact, it reflects a perceived gap between desired and actual levels of social interaction. According to Social Pain Theory, proposed by Eisenberger and Lieberman (2005), the theory is a neurobiological framework that fundamentally reshaped how we understand loneliness. It posits that the human brain processes **social exclusion** in ways that are strikingly similar to physical pain. This theory is supported by neuroimaging studies, which show that regions such as the dorsal anterior cingulate cortex (dACC) and the anterior insula areas traditionally associated with physical pain also activate during experiences of social rejection or exclusion. From an evolutionary standpoint, this overlap makes sense, as humans are social animals whose survival once depended on being accepted within a group. As such, the brain evolved to treat social disconnection as a significant threat, much like physical injury.

When applied to the context of Substance Use Disorders (SUDs), Social Pain Theory helps explain why loneliness can be such a potent trigger for relapse. The distress caused by social pain can become intolerable, especially in individuals already prone to emotional dysregulation. In the absence of secure attachments or supportive relationships, individuals may turn to substances as a way to "self-soothe" or dampen the intense psychological discomfort caused by perceived social isolation (Gutkind et al., 2021). Drugs and alcohol, particularly those that affect the brain's reward and opioid systems (e.g., opioids, alcohol, benzodiazepines), may temporarily alleviate feelings of social pain, offering short-term relief while increasing long-term vulnerability (Ingram et al., 2020).

This explains why interventions aimed at enhancing social connectedness, rather than just promoting abstinence, are critical for relapse prevention. Simply put, if the pain of loneliness goes unaddressed, substance use becomes a form of neurochemical escape, a maladaptive but accessible "treatment" for a profoundly human need. The theory also helps destigmatize addiction, reframing it not merely as moral failure or lack of willpower, but as a desperate attempt to regulate pain through any available means when social resources are lacking.

In a similar vein, the Self-Medication Hypothesis (SMH), originally proposed by Edward Khantzian in the late 1980s and refined in the 1990s, provides a psychodynamic lens for understanding substance use and relapse (Khantzian, 1997). It suggests that individuals who misuse substances are often attempting to alleviate emotional or psychological distress that they are unable to cope with through healthier means. In this theory, the choice of substance is not random but reflects the individual's underlying psychological needs (Mariani et al., 2014). For example, a person with chronic anxiety might gravitate toward sedatives like benzodiazepines or alcohol, while someone experiencing emotional numbness might prefer stimulants to feel more "alive." When applied to loneliness, the SMH helps explain

how emotional voids caused by a lack of meaningful connection can drive individuals toward substance use as a compensatory mechanism. Loneliness is not just a feeling; it is often accompanied by rumination, low self-worth, and heightened vulnerability to depressive or anxious states (Gutkind, et al., 2021). In such a psychological context, substances may serve as a temporary balm, offering a sense of euphoria, confidence, or emotional detachment. Over time, however, reliance on substances can undermine natural coping skills, reinforce avoidance behaviors, and weaken the very social connections needed to escape the cycle of loneliness in the first place.

Importantly, the SMH underscores relapse not as failure, but as a signal that underlying psychological needs remain unmet. This insight has profound implications for treatment: programs focused solely on abstinence or behavioral control may miss the emotional roots of addiction. Instead, effective treatment must address the emotional drivers, including loneliness, trauma, shame, or unresolved grief. For patients with a history of chronic social disconnection, treatment must not only teach coping skills but also rebuild emotional intimacy and social trust, key ingredients that reduce the reliance on substances as a means of self-medication.

III. PERCEIVED STIGMATIZATION AND RELAPSE

Perceived stigma refers to an individual's internalized belief that they are being judged or devalued by others due to their history of substance use. This internalization of negative societal labels is deeply grounded in Erving Goffman's (1963) theory of stigma. This theory is a foundational sociological framework that explains how individuals with socially devalued characteristics, such as a history of substance use, are subjected to processes of dehumanization, identity distortion, and exclusion. Goffman conceptualized stigma as an attribute that is deeply discrediting and that reduces the bearer from a "whole and usual person to a tainted, discounted one." He distinguishes between three types of stigma: (1) physical deformities, (2) blemishes of individual character (which includes drug addiction, criminality, or mental illness), and (3) tribal stigmas related to race, religion, or ethnicity. SUDs squarely fall into the second category, "blemishes of individual character," where the individual is judged as morally weak or personally flawed (Earnshaw, 2020).

According to Goffman, once someone is stigmatized, their entire identity becomes overshadowed by the discrediting attribute. For example, a person recovering from heroin addiction is not seen as a "person who used heroin and is now in recovery," but as a "junkie," a label that erases nuance and humanity. This has serious psychological consequences. Internally, it leads to shame, low self-worth, and identity crises. Socially, it leads to marginalization, loss of opportunities, and restricted access to support systems, employment, or even healthcare. Stigma thus becomes a self-fulfilling prophecy, where the individual's discredited status

leads to social withdrawal and, in the case of SUDs, heightened risk of relapse.

Moreover, Goffman emphasized the concept of "felt stigma," which refers to the internal anticipation of rejection and judgment, regardless of whether stigma is actively expressed. This idea aligns closely with the modern understanding of perceived stigma, which can exist even in environments that outwardly appear supportive. For many SUD patients, the fear of being judged by therapists, peers, or family members may prevent them from fully engaging in treatment or disclosing their struggles, both of which are crucial for sustained recovery. In short, Goffman's theory leads to an understanding of how social labeling becomes psychological oppression, particularly for those with SUDs. It explains why individuals may internalize public stigma, leading to emotional pain, identity erosion, and social isolation, all of which are known risk factors for relapse.

Additionally, Modified Labeling Theory (MLT), developed by Bruce Link and colleagues (1989), builds on Goffman's insights but takes them a step further by focusing on the anticipatory and behavioral consequences of being labeled. Originally designed to explain the stigma surrounding mental illness, MLT is highly applicable to substance use because addiction is often socially treated as a moral failure or mental weakness. According to MLT, being publicly labeled as "mentally ill" (or in this case, as an "addict" or "junkie") leads individuals to internalize the stereotypes associated with that label, even if they do not consciously endorse them. Crucially, MLT introduces the idea that stigma does not just affect how others treat a person; it changes how the person behaves in anticipation of that treatment. Individuals who believe that others will reject or devalue them due to their SUD history are likely to withdraw socially, avoiding relationships or community spaces; suppress their identities, choosing silence over disclosure; avoid or drop out of treatment, fearing judgment from providers or other patients; and conform to the label, believing they are hopeless, unworthy of help, or destined to relapse.

This leads to what scholars call a "labeling cascade," which is a chain reaction where the expectation of stigma results in behaviors (isolation, emotional avoidance, treatment disengagement) that actually increase the risk of poor outcomes, including relapse (Crapanzano et al., 2018). For instance, a recovering person who anticipates judgment from employers or family may avoid seeking support, lose motivation, and return to substance use in times of stress, believing they have no place or value in society. Furthermore, MLT shows how societal narratives around addiction shape personal identity and behavior. When addiction is framed in society as a weakness rather than a treatable condition, individuals labeled as "addicts" are more likely to internalize hopelessness and reject recovery as unattainable (Kulesza, 2014). This theory, therefore, supports the importance of language, policy, and public education in reducing stigma, not only to improve how society treats individuals with SUDs but to transform how those individuals see themselves (Moon et al., 2019).

IV. PERCEIVED SOCIAL SUPPORT AND RECOVERY

Perceived social support is a crucial counterbalance to the risks posed by loneliness and stigma in recovery from Substance Use Disorders (SUDs). It is fundamentally about an individual's subjective belief that they are valued, cared for, and can draw upon emotional or practical help from their social connections (Havassy et al., 1991). This perception of support is not merely about the number of people in one's network, but rather the quality and availability of supportive relationships. The Buffering Hypothesis, as developed by Cohen and Wills (1985), posits that social support acts as a protective shield against the negative impacts of stress. Instead of directly reducing stress itself, social support moderates or "buffers" the deleterious effects that stress can have on an individual's well-being and health outcomes. In the context of SUD recovery, this hypothesis is particularly relevant because stress is a well-established trigger for relapse. When individuals encounter stressors, which can range from acute life events to chronic daily hassles, or even internal experiences like cravings, perceived social support provides resources that help them manage these challenges more effectively. Essentially, for someone in recovery, perceived social support acts as a safety net. When life inevitably presents challenges or temptations, the presence of strong social bonds reduces the likelihood that these stressors will overwhelm their coping abilities and lead to a return to substance use.

Building on these theoretical foundations, this study seeks to empirically examine the extent to which loneliness, perceived stigmatization, and perceived social support predict relapse rates among patients with SUDs in Nigeria. While these variables have been individually studied in various global contexts, their combined influence, particularly within the sociocultural landscape of Nigeria, remains underexplored. In a society where moral and religious expectations strongly shape public perceptions of substance use, the dynamics of stigma, social rejection, and relational support may function differently compared to Western contexts. This study, therefore, addresses a crucial gap by not only applying validated psychological theories but also localizing the inquiry to reflect cultural realities.

The specific objectives are to examine the associations between loneliness and relapses; investigate the relationship between perceived stigmatization and relapse; explore the impact of perceived social support on relapse rates; and investigate the joint and independent prediction of loneliness, perceived stigmatization, and social support on relapse among SUD patients. The hypotheses are aligned accordingly and grounded in the theoretical perspectives outlined above, and they include:

- Loneliness will significantly predict the rate of relapse among SUD patients.
- Perceived stigmatization will significantly predict relapse among SUD patients.
- Perceived social support will significantly predict relapse rates among SUD patients.

- Loneliness, perceived stigmatization, and social support will jointly and independently predict relapse rates among SUD patients.

In summary, this introduction sets the stage for a theoretically rich and clinically significant study. It moves beyond biomedical explanations of addiction to highlight the psychological, social, and perceptual realities that shape relapse outcomes. By rooting its investigation in established psychological theories and adapting them to the Nigerian context, the study promises to offer both empirical insight and culturally responsive recommendations for improving SUD treatment and long-term recovery.

V. METHOD

The methodological framework employed in this study reflects a carefully considered and ethically appropriate approach to examining the psychosocial dynamics of relapse among patients with Substance Use Disorders. An *ex post facto* research design was employed, which was particularly suitable for studies where the variables of interest, such as loneliness, perceived stigmatization, and perceived social support, cannot or should not be manipulated experimentally. Instead of attempting to induce or alter these psychosocial states, the variables were observed in their natural variations across participants and statistically assessed to determine how these variables related to relapse rates. This design allowed for robust correlational and predictive analysis while maintaining the ethical integrity required when working with a vulnerable population.

The setting of the study, the Federal Neuropsychiatric Hospital in Yaba, Lagos, Nigeria, provided a clinically relevant and contextually rich environment in which to investigate these phenomena. As one of the leading psychiatric institutions in Nigeria, it receives a diverse cross-section of SUD patients from different parts of the six geopolitical zones in the Country (Southwest, South-South, Southeast, Northwest, Northeast and North central) and overseas, making it a fertile ground for examining both universal and culturally specific factors in addiction and recovery. The total sample consisted of 143 in-patients, which, while modest in scale, was a substantial number within the confines of clinical research, particularly in specialized mental health facilities. The use of simple random sampling further strengthened the study by minimizing selection bias and ensuring that the sample was representative of the larger inpatient SUD population at the facility.

The data collection involved a comprehensive, four-part questionnaire structure, with each section aligned to a distinct construct in the study. Section A focused on gathering socio-demographic data, such as age, sex, marital status, educational background, and occupation, information that allowed for the contextualization of findings and potential control of confounding variables. Section B assessed loneliness using the Revised UCLA Loneliness Scale, a well-validated 20-item scale developed by Russell, et al., (1978). Participants rated each item on a scale from 1 (Never) to 4 (Often). The measure has strong psychometric properties

including a high internal consistency (coefficient alpha = .96) and a test-retest correlation over a two-month period of .73.

The inclusion of this scale reflected a sophisticated understanding of loneliness as a multidimensional construct that encompasses emotional, social, and existential disconnection. Section C evaluated perceived stigmatization through a 28-item Stigma Scale developed by King et al. (2007), utilizing a 5-point Likert response format. With a reported Cronbach’s Alpha of .87, this instrument offers both reliability and sensitivity in capturing the nuanced perceptions of stigma among individuals in recovery. Section D, which measured perceived social support, employed the Multidimensional Scale of Perceived Social Support (MSPSS). This 12-item tool not only enjoys widespread use in psychological research but also boasts a strong reliability coefficient ($\alpha = .95$), making it an ideal choice for gauging participants’ perceptions of emotional and instrumental support from various sources.

Importantly, a pilot study was conducted to assess the reliability of these instruments within the local context. The high Cronbach alphas, .95 for loneliness, .91 for stigma, and .93 for social support, confirmed that the instruments retained their internal consistency when applied to a Nigerian population, thereby enhancing the study’s methodological rigor and cultural validity. Ethical considerations were also given due attention. The researchers obtained approval from the hospital’s ethical review committee and ensured informed consent from all participants. This step was critical, not only for legal compliance but also to uphold the principles of autonomy, beneficence, and respect for persons, especially pertinent when engaging individuals whose decision-making

capacity may be compromised by mental health or substance-related challenges.

The study also clearly defined inclusion and exclusion criteria to further refine the sample. Only SUD patients without psychosis and who expressed a willingness to participate were included, while those with other diagnoses or who declined participation were excluded. This careful delineation enhanced internal validity by reducing confounding from severe comorbid psychiatric symptoms. Data analysis was conducted using SPSS (version 27). Descriptive statistics were employed to profile demographic variables. Both simple linear regression and multiple linear regression analyses were used to test the predictive relationships between the psychosocial factors and relapse rates. This analytical approach was well-aligned with the study’s objectives, allowing not only the identification of the individual predictors but also understanding how the variables operated collectively to influence relapse.

VI. RESULTS

A total of 143 patients diagnosed with substance use disorders participated in the study. The participants’ ages ranged from 20 to over 35 years, with the largest proportion (45.5%) falling within the 25–29 years age group, followed by 29.4% aged 30–34 years. The mean age of the participants was approximately 25.29 years ($SD = 6.72$), indicating a predominantly young adult population. In terms of gender distribution, a majority of the participants were male (79%). This demographic profile reflects the typical composition observed in substance use disorder treatment populations, where males often outnumber females and young adults represent a substantial portion of those seeking treatment.

Table 1 Descriptive Statistics Showing the Demographic Distribution of Study Respondents

(N=143)			
Variables	Options	Frequency	Percentage
Age (\bar{x} 25.29 \pm 6.72)	20-24 years	16	11.2
	25-29 years	65	45.5
	30-34 years	42	29.4
	35 years and above	20	14.0
Sex	Male	113	79.0
	Female	30	21.0

➤ *Hypothesis 1: Loneliness will Significantly Predict the Rate of Relapse among SUDs Patients*

The analysis revealed that loneliness was a significant predictor of relapse among patients with substance use disorders. The simple linear regression showed a positive and statistically significant relationship between loneliness and relapse rates ($\beta = .527, p < .05$). This indicates that individuals who reported higher levels of loneliness were more likely to experience more frequent relapses. The coefficient of determination ($R^2 = .28$) suggested that loneliness alone accounted for approximately 28% of the variance observed in relapse rates, which reflected a substantial influence of this variable. These results support the notion that loneliness

contributes meaningfully to the challenges faced by SUD patients during recovery. When individuals feel socially disconnected and isolated, they may lack emotional support, encouragement, or a sense of belonging, which are critical factors in sustaining long-term abstinence. In the absence of meaningful social connections, individuals may resort to substance use as a coping mechanism for negative emotions or to alleviate feelings of emptiness, thereby increasing the likelihood of relapse. This finding underscored the importance of addressing loneliness in clinical interventions for individuals undergoing treatment for substance use disorders.

Table 2 Summary of Linear Regression Showing the Predictive Role of Loneliness on the Rate of Relapse

Variable	B	SE	β	t	R	R ²	p
(Constant)	1.071	.239		4.479	.53	.28	<.05
Loneliness	.028	.004	.527	7.371			<.05

➤ *Hypothesis 2: Perceived Stigmatization will Significantly Predict Relapse among SUDs Patients*

Perceived stigmatization also emerged as a significant predictor of relapse among the study participants. The regression analysis demonstrated a positive relationship between perceived stigma and relapse rates ($\beta = .344, p < .05$). In other words, individuals who experienced higher levels of perceived stigma were more likely to relapse. The R² value of .118 indicates that perceived stigma accounted for approximately 11.8% of the variance in relapse rates,

suggesting that while its impact is somewhat smaller compared to loneliness, it still played a considerable role in determining relapse outcomes. The experience of stigma likely erodes self-esteem, increases feelings of shame, and fosters internalized negative beliefs, which can all undermine motivation and confidence in one’s ability to maintain sobriety. Moreover, stigma may discourage individuals from seeking or accepting social support and treatment services due to fear of judgment or rejection, further exacerbating their risk of relapse.

Table 3 Summary of Linear Regression Showing the Predictive Role of Perceived Stigma on Rate of Relapse

Variable	B	SE	β	t	R	R ²	p
(Constant)	3.380	.154		21.918	.344	.118	<.05
Perceived Stigma	.16	.004	.344	4.351			<.05

➤ *Hypothesis 3: Perceived Social Support will Significantly Predict Relapse Rates among SUDs Patients*

The study also found that perceived social support had a significant and inverse relationship with relapse rates. Specifically, the regression analysis demonstrated that higher levels of perceived social support were associated with lower rates of relapse ($\beta = -.345, p < .05$). The negative beta coefficient reflected the protective effect of social support, suggesting that as individuals perceived greater support from their social network, their likelihood of experiencing a relapse

decreased. The R² value of .199 indicates that perceived social support explained approximately 19.9% of the variance in relapse rates. This finding highlighted the critical role that social support systems play in promoting recovery and resilience among individuals with substance use disorders. Support from family, friends, and peers can provide emotional encouragement, practical assistance, accountability, and a sense of belonging that helps buffer against the stresses and challenges that may otherwise trigger relapse.

Table 4 Summary of Linear Regression Showing the Predictive Role of Perceived Social Support on Rate of Relapse

Variable	B	SE	β	t	R	R ²	p
(Constant)	3.374	.153		22.118	.345	.199	<.05
Perceived Social Support	-.030	.007	-.345	-4.364			<.05

➤ *Hypothesis 4: Loneliness, Perceived Stigmatization, and Social Support will Jointly and Independently Predict Relapse Rates among SUDs Patients*

When all three psychosocial factors were entered into a multiple regression model, the analysis demonstrated that loneliness, perceived stigma, and perceived social support jointly accounted for a significant proportion of the variance in relapse rates ($R^2 = .32, F(3, 139) = 24.90, p < .01$). Collectively, these factors explained 32% of the variability in relapse rates among the study participants, indicating that they have a meaningful combined effect on relapse outcomes. Examining the independent contributions of each factor within the joint model revealed that loneliness ($\beta = .477, p < .05$) and perceived stigma ($\beta = -.250, p < .05$) remained

significant predictors, whereas perceived social support ($\beta = .058, p > .05$) did not independently predict relapse when controlling for the other variables. This suggested that while social support has a significant protective effect on its own, its influence may overlap or interact with the effects of loneliness and stigma when considered together. In other words, the absence of loneliness and stigma may inherently reflect the presence of supportive social relationships, reducing the distinct contribution of perceived social support in the joint model. These results underscore the complex interplay of psychosocial factors in shaping relapse risk and highlight the need for comprehensive treatment approaches that simultaneously address multiple dimensions of patients' psychosocial well-being.

Table 5 Summary of Multiple Regression Analysis Showing the Prediction of Loneliness, Perceived Stigmatization, and Social Support on Rate of Relapse.

Predictors	B	SE	β	t	p	R	R ²	F	p
(Constant)	1.575	.332		4.742					
Loneliness	.025	.004	.477	6.183	<.05	.56	.32	24.90	<.01
Perceived Stigma	-.012	.006	-.250	-1.987	<.05				
Perceived Social Support	.005	.012	.058	.437	>.05				

VII. DISCUSSION

The present study investigated the role of psychosocial factors, namely loneliness, perceived stigmatization, and perceived social support, in predicting relapse rates among patients with substance use disorders (SUDs) receiving treatment in Nigeria. The findings provided important insights into how these psychosocial variables interacted to influence recovery outcomes.

Firstly, the study found that loneliness significantly predicted higher relapse rates among SUD patients. This result was consistent with previous studies, such as those conducted by Ingram et al. (2020) and Polenick et al. (2021), which have documented a strong association between loneliness and relapse vulnerability. Loneliness often exacerbates feelings of emptiness, emotional distress, and psychological discomfort, driving individuals toward maladaptive coping mechanisms like substance use. In the absence of meaningful social interactions and connections, individuals may lack the emotional regulation skills and social reinforcement necessary to maintain abstinence, making relapse more likely.

Secondly, perceived stigmatization also significantly predicted relapse. Patients who experienced greater levels of perceived stigma were found to relapse more frequently. This was consistent with prior research, including studies by Crapanzano et al. (2018) and Birtel et al. (2017), which emphasized that stigma contributed to shame, low self-worth, and psychological distress. Individuals who felt stigmatized may withdraw from social networks, avoid seeking professional help, or internalize negative societal attitudes, all of which could severely undermine their recovery efforts and increase the likelihood of relapse.

Thirdly, perceived social support emerged as a protective factor, significantly predicting lower rates of relapse. This aligned with findings by Shaarif et al. (2025), who highlighted the positive role of supportive social networks in aiding recovery. Emotional, informational, and practical support from family, friends, and peers enhanced coping mechanisms, provided a sense of belonging, and acted as a buffer against stressors that may trigger substance use. The role of social support was particularly critical in mitigating the isolating effects of both loneliness and stigma, contributing to sustained recovery.

Finally, the joint analysis of these factors revealed that loneliness, perceived stigma, and social support collectively explained a significant portion of the variance in relapse rates. However, when considered together, loneliness and perceived stigma remained significant independent predictors, while social support's independent effect became statistically nonsignificant. This suggested a complex interplay where the protective effects of social support may overlap with the mitigating effects on loneliness and stigma, underscoring the interconnectedness of these psychosocial factors in shaping relapse outcomes.

➤ Implications

The findings of this study have several important implications for clinical practice, policy, and program development and they involve:

- Treatment programs for SUD patients extending beyond medical detoxification and focus on addressing psychosocial factors like loneliness and stigma.
- Public health campaigns, community education, and professional training programs aiming to reduce stigma associated with substance use to encourage treatment-seeking and community reintegration.
- Establishing strong peer support groups, family-based interventions, and community resources that enhance patients' sense of belonging and reduce their risk of relapse.
- Routine clinical assessments, including evaluations of loneliness, perceived stigma, and social support levels to tailor individualized treatment plans that address these vulnerabilities, should be employed.
- Policymakers should recognize the role of these psychosocial variables and allocate resources to integrate mental health, social support services, and substance abuse treatment in a more cohesive manner.

➤ Limitations

Despite the valuable insights gained, the study was not without limitations. The study was conducted with a relatively small sample size (N = 143) from a mental health facility in Nigeria, limiting the generalizability of the findings. Reliance on self-report instruments may have introduced response biases such as social desirability or recall bias. Lastly, other potential factors such as severity of substance use, comorbid psychiatric conditions, family dynamics, or socioeconomic status were not included but may also have influenced relapse.

VIII. RECOMMENDATIONS

Based on the findings, treatment centers should integrate psychosocial interventions such as counseling on loneliness, cognitive-behavioral therapy targeting self-stigma, and the development of social skills. Family participation in therapy should also be encouraged to foster supportive home environments that reinforce recovery. Clinicians should be trained to recognize and address the psychosocial needs of patients alongside their substance use treatment, utilizing the step-wise tiered intervention for SUD treatment. Community-based rehabilitation programs that emphasize building social networks, peer mentorship, and group activities should be developed.

IX. SUGGESTIONS FOR FUTURE STUDIES

Future research should aim to address the limitations of this study and further expand on its findings by conducting multi-site studies with larger and more diverse samples to enhance generalizability, employing longitudinal designs to better capture causal relationships and track changes over time, utilizing objective measures of relapse (e.g., drug screening, collateral reports) to complement self-report data,

examining additional psychosocial and clinical variables, such as co-occurring mental health disorders, coping styles, or trauma histories, which may also contribute to relapse risk. and testing the effectiveness of interventions that specifically target loneliness, stigma, and social support in reducing relapse rates.

X. CONCLUSION

In summary, this study established that psychosocial factors such as loneliness, perceived stigma, and perceived social support significantly affected relapse rates among SUD patients. Loneliness and perceived stigma increased the likelihood of relapse, while strong perceived social support decreased it. These findings highlighted the necessity for treatment approaches that went beyond clinical detoxification and incorporated psychosocial interventions. By addressing these underlying social and psychological factors, treatment programs can significantly enhance the long-term success of recovery efforts and reduce relapse rates.

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