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Original Article

Exploring Self-Stigma, Resilience, and Risk of Relapse Among Plea Bargainers in Drug-Related Cases: Basis for the Enhancement of Community Assisted Recovery and Rehabilitation Outpatient Training Services – Salubong Aftercare

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Abstract. The main purpose of the study was to investigate whether self-stigma and resilience were predictors of risk of relapse among plea bargainers in drug-related cases, utilizing a descriptive correlation design. A non-probability sampling, specifically a combination of purposive and convenience sampling, was employed. A total of three hundred male plea bargainers in drug-related cases participated in the study. Results revealed that among the respondents, neither self-stigma nor resilience significantly predicted the risk of relapse. However, internalized stigma, as a domain of self-stigma, significantly predicted Compulsivity for Drug (CD), a domain of risk of relapse. Similarly, Enacted Stigma, Anticipated Stigma, and Overall Self-Stigma collectively predicted the Lack of Negative Expectancy for the Drug (NE). The study's results helped enhance Community Assisted Recovery and Rehabilitation Outpatient Training Services - Salubong Aftercare in community-based drug rehabilitation.

Keywords: *Plea bargainers in drug-related cases; Resilience; Risk of relapse; Self-stigma.*

The Philippine society is gradually recognizing the urgency of expediting the resolution of drug-related cases. According to Bueza (2017), in the first six months of Rodrigo Duterte's presidency, from July 2016 to January 2017, a total of 43,593 PNP drug operations were conducted, leading to the arrest of 53,025 alleged "drug personalities", and surrenders of 1,189,462 individuals for their involvement in illegal drug activities. In response to this overwhelming caseload, the Supreme Court of the Philippines introduced Plea Bargaining agreements in drug-related cases. Many individuals label it as anti-poor and claim that it primarily benefits judges, prosecutors, and lawyers (Ciocchini & Lamchek, 2023). As the new policy is embraced, programs have emerged to address the

needs it entails. One of these is the Community Assisted Recovery and Rehabilitation Outpatient Training Services - Salubong (CARROTS-Salubong), pioneered by the Caloocan City LGU and implemented by the Caloocan City Anti-Drug Abuse Council in partnership with the Diocese of Caloocan.

Plea bargainers in drug-related cases will undergo a 16-week program comprised of self, family, and community interventions. The initial phase of the program "Self" is grounded in the foundational constructs of self-awareness, self-realization, self-acceptance, and self-actualization. However, according to Tristanto et al. (2022), individuals living with stigmatized conditions encounter challenges in the treatment and care process due to the dual experience of residing within the same society while simultaneously enduring their own stigma. In contrast, the program still lacks, particularly, tools to help plea-bargainers rebuild themselves after their own stigma. Self-stigma refers to the internalized negative beliefs individuals hold about themselves due to their condition or past behavior. It acts as a significant barrier to seeking help, stemming from the fear that doing so may diminish one's self-respect, self-satisfaction, self-confidence, and overall sense of self-worth (Corrigan, 2004; Hoidrag, 2022).

Research by Yamashita et al. (2021) demonstrates the necessity of recovery support to enhance resistance to illegal drugs and to prevent relapses. Indeed, supports the second phase of CARROTS-Salubong "Family", which aims to provide opportunities for reconciliation and forgiveness. However, according to Hernanto et al. (2020), drug recovery addicts have low resilience, and individuals around them play an important role in fostering their resilience. Addressing the resilience of these populations is crucial for their successful recovery. On the other hand, Simpson (2020) acknowledged the need to identify factors of recovery at the individual, family, and community levels, which aligns with the next variable of this study and the third phase of CARROTS-Salubong.

"Community," the last phase of CARROTS-Salubong, aims to help the plea-bargainers successfully reintegrate into their respective communities by participating in programs such as barangay-based cleaning and beautification and a church-based service program. However, this phase is crucial as plea-bargainers in drug-related cases will be challenged on their own risk of relapse. However, studies have shown that self-stigma significantly impacts individuals' perceptions of themselves during addiction recovery (Vilus & Perich, 2021), and resilience plays a vital role in reducing the risk of relapse and maintaining recovery (Post et al., 2021). These factors have played a role in possibly predicting the risk of relapse among plea bargainers in drug-related cases.

CARROTS-Salubong Program by the Caloocan City Anti-Drug Abuse Office demonstrated strong alignment with the United Nations Office on Drugs and Crime standard for community-based drug rehabilitation by using individualized case management, family and community reintegration, and a multi-stakeholder approach involving the local government of Caloocan City, civil society, and religious institutions such as the Diocese of Caloocan. However, there are gaps that still require further research, such as the lack of published outcome data and the unclear reliability relative to other evidence-based practices. The UNODC stresses the need for standardized, evidence-based, and sustainable interventions with measurable outcomes, which CARROTS-Salubong has yet to establish fully. Conducting this research on the program is essential to validate its impact, enhance its methods, and inform future policy and practice in community-based treatment for substance use, not only in Caloocan City but also in the Philippines.

Despite the recognition of the government and establishment of programs like CARROTS-Salubong, a gap in more sustained addiction treatment and research to explore the complexity of drug recovery remains, specifically among plea bargainers in drug-related cases. This research aims to address this gap by examining self-stigma, resilience, and the risk of relapse among this population. This study aims to contribute to reducing the risk of them returning to illegal drug use by offering an enhancement program tailored to their specific needs. This goal aligns with Sustainable Development Goal 3, which promotes the goal of ensuring healthy lives and well-being for all (United Nations, 2015). Therefore, understanding these factors, such as self-stigma, resilience, and how they are affecting the risk of relapse of plea bargainers in drug-related cases, is crucial.

This study integrated relevant concepts that are important to the topic, particularly focusing on the variables at hand. The inclusion of various theories sheds light on how self-stigma and resilience affect the risk of relapse. This theoretical framework explores the interactions among various factors, focusing on the dynamic relationships between self-stigma, resilience, and the risk of relapse among plea bargainers in drug-related cases. The Modified Labeling Theory, the Resilience Framework, and the Transtheoretical Model provided thorough insights into the factors that influence the risk of relapse among plea bargainers in drug-related cases.

According to Modified Labeling Theory by Link (1989), individuals who are labeled as having a mental illness or engaging in criminal behavior often internalize these labels, leading to anticipated stigma and subsequent coping strategies. In the context of plea bargainers, the dual labels of "offender" and "substance abuser" can significantly impact their self-perception and recovery journey. Plea bargainers may experience self-stigma as they navigate the criminal justice system. The anticipation of negative societal reactions can lead to feelings of shame and humiliation, which are critical components of self-stigma. This internalization of stigma can hinder their motivation to engage in recovery programs, as they may feel unworthy of support or fear further rejection from their communities.

The Resilience Framework (2003), developed by Masten & Powell, provides a comprehensive understanding of resilience by identifying multiple factors that contribute to individuals' ability to bounce back from adversity. This theory emphasizes the multidimensional nature of resilience and recognizes that resilience is not a fixed trait but rather a complex interaction of individual, relational, contextual, and cultural factors. Within this study, the Resilience Framework is applied to understand how plea bargainers in drug-related cases overcome adversity that impacts their risk of relapse. By recognizing the multidimensional nature of resilience, a program or intervention can be tailored to support these individuals and ultimately contribute to a lower risk of relapse, as proposed by the Resilience Framework.

The Transtheoretical Model by Prochaska & DiClemente (1970) describes the process individuals go through when making behavior changes, including those involved in addiction recovery. This model posits that behavior change is not a single event but a process unfolding over time through a series of stages. This model provided a holistic framework for understanding the risk of relapse among plea bargainers in drug-related cases, predicting and preventing their relapse. This theoretical framework integrates the Transtheoretical Model for risk of relapse, the Resilience Framework for resilience, and Modified Labeling Theory for self-stigma of plea bargainers in drug-related cases. The findings of this study may inform the development of policies and procedures aimed at lowering the risk of relapse of plea bargainers in drug-related cases.

This study delves into the realms of self-stigma, resilience, and the risk of relapse among individuals who have entered plea bargaining in drug-related cases. Additionally, it seeks to identify potential connections among these factors and to propose enhancements to the CARROTS-Salubong Aftercare program.

Methodology

Research Design

This study employed a quantitative approach. The researcher utilized a descriptive-correlational design to analyze relationships and impacts among the assessed variables. The quantitative approach offers a structured framework for examining numerical data and identifying correlations and influences (Creswell, 2014). In this study, the researcher assessed the relationships among self-stigma, resilience, and the risk of relapse. As well as the impact of self-stigma and resilience on the risk of relapse of the male plea bargainers in drug-related cases. The use of the quantitative research method over alternative approaches is widely recognized among both researchers and experts in various fields.

According to Rahman (2016), the use of a quantitative approach in research has many advantages, including a larger sample size and shorter data-collection time. It was supported by the study by Gnawali (2022), which noted that this approach offers several advantages, including extrapolating results to the entire population or specific subgroups, expediting data processing with statistical software, and providing an objective measurement of reality through data analysis. This consistent argument provides strong evidence that this approach is essential for identifying correlation and impacts for such variables as self-stigma, resilience, and risk of relapse among plea bargainers in drug-related cases.

Participants and Sampling Technique

Respondents in this study are male plea bargainers in drug-related cases. The researcher intentionally selected these individuals to explore their self-stigma, resilience, and risk of relapse. The aim is to reduce the risk of them returning to illegal drug use by offering a customized program tailored to their specific needs. Raharni et al. (2022) suggest that illegal drug use is a multifaceted issue influenced by a range of factors. Internal dynamics, such as

family interactions, economic circumstances, and communication within familial contexts, contribute to the risk of relapse. Therefore, understanding these factors, such as self-stigma, resilience, and how they affect the risk of relapse of plea bargainers in drug-related cases, is crucial. For the sampling size, Maxwell (2000) mentioned that three hundred (300) respondents are needed for research that has two predictors, and two hundred (200) for those that have one predictor. Therefore, the researcher will have a total of 300 respondents for this study, using two predictors.

The researcher used a non-probability sampling technique, a purposive convenience sampling. A mixed-methods approach using purposive and convenience sampling. The purposive sampling technique is often used when studying a specific aspect of society or when the entire population is difficult to access (Douglas, 2022). It can also be used in combination with other sampling strategies to identify and select information-rich cases (Andrade, 2020). One of those is convenience sampling, which involves selecting subjects who are readily accessible to the researcher (Suen et al., 2014). The researcher purposively and conveniently selected active participants from the Caloocan City Anti-Drug Abuse Council Plea Bargainers as respondents for this study.

Research Instrument

Substance Use Stigma Mechanisms Scale

The Substance Use Stigma Mechanisms Scale (SU-SMS), co-developed by Smith & Earnshaw (2019), is a comprehensive tool for measuring an individual's self-stigma regarding substance use. It includes 6 questions about enacted stigma, 6 about anticipated stigma, and, lastly, 6 about internalized stigma, totaling 18 questions. The SU-SMS produces a comprehensive assessment by examining responses across three distinct subscales. This approach offers valuable insights into the self-stigma measures among plea bargainers in drug-related cases. The SU-SMS is a self-administered survey that assesses an individual's self-stigma across three subscales to better understand this variable. SU-SMS may be administered to substance-using populations more broadly, including those who are out-of-treatment, non-treatment seeking, and treatment-seeking. SU-SMS internal consistency was evaluated using Cronbach's alpha and was tested on 175 samples, with a Cronbach's alpha of 0.93, suggesting high internal consistency.

The Nicholson McBride Resilience Questionnaire

The Nicholson McBride Resilience Questionnaire, developed by McBride (2008), is a 12-item instrument designed to assess an individual's overall resilience. This approach offers valuable insights into the resilience measures among plea bargainers in drug-related cases. Sample statements from items 1, 2, and 3 are: "In a difficult spot, I turn at once to what can be done to put things right", "I influence where I can, rather than worrying about what I cannot influence", "I do not take criticism personally". The respondents will answer the question using the following scale: 1 ("Strongly Disagree"), 2 ("Mildly Disagree"), 3 ("Neutral"), 4 ("Mildly Agree"), and 5 ("Strongly Agree").

Stimulant Relapse Risk Scale

The Stimulant Relapse Risk Scale (SRRS) by Ogai et al. (2017), is a comprehensive tool comprising 5 subscales: Anxiety and Intention to Use Drug (Al), Emotionality Problems (EP), Compulsivity for Drug (CD), Positive Expectancies and Lack of Control over Drug (PL), and Lack of Negative Expectancy for the Drug (NE), and one lie scale "Insight into One's Own Drug Problem" is included as an auxiliary measure (Harada et al., 2023). This scale proves valuable in assessing the risk of relapse among individuals involved in drug-related cases, including plea bargainers. SRRS scores high in internal consistency, with a Cronbach's alpha of .89 among 305 Filipino participants. SRRS also has a significant positive correlation in subjective drug craving of $r = 0.19$, $p < 0.001$, confirming a certain level of validity.

Data Gathering Procedure

The researcher obtained all necessary documents, including ethical clearance, before conducting a face-to-face survey. These surveys will consist of standardized questionnaires, namely the Substance Use Stigma Mechanisms Scale (SU-SMS) with 18 items, the Nicholson McBride Resilience Questionnaire (NMRQ) with 12 items, and the Stimulant Relapse Risk Scale (SRRS) with 35 items. The numerical data obtained in this study are electronically disseminated using Microsoft Excel and software such as JAMOVI. The researcher also ensured that errors and inconsistencies in the data-gathering process were identified and corrected. The population for data collection comprises 300 male plea bargainers in drug-related cases residing in the city of Caloocan and currently active participants in Community Assisted Recovery and Rehabilitation Outpatient Training Services - Salubong

(CARROTS-Salubong). Additionally, respondents must provide informed consent, indicating their voluntary participation in the study. When a respondent decides not to sign the informed consent form, their decision is respected, and they are not obliged to continue. The questionnaires presented include provisions to assist respondents who may have difficulty understanding the questions. The researcher provided objective explanations of the questions as needed. Data collection occurs at various churches in Caloocan City, where these Community Assisted Recovery and Rehabilitation Outpatient Training Services are happening.

Data Analysis Procedure

Descriptive Statistics

The researcher used descriptive statistics in this study because they are useful for summarizing and providing insights into various aspects of the data, particularly levels of self-stigma, resilience, and relapse risk. The weighted mean and standard deviation allow each data point to contribute to the total with varying weights.

Pearson Correlation Coefficient

To determine the significant correlation of self-stigma, resilience, and risk of relapse among plea bargainers in drug-related cases, the researcher will collect, tabulate, and analyze the data using the Pearson correlation coefficient. As stated by Chen and Anderson (2023), the Pearson correlation coefficient is used when a research study has two or more variables and a researcher wants to explore whether there is a linear relationship among them. The Pearson correlation coefficient will be used to assess correlations among the three variables.

Regression Analysis

This statistical method will be the second statistical technique chosen by the researcher to evaluate and predict the effects of the variables, including the two (2) IVs: Self-stigma and Resilience, and the one (1) DV: Risk of Relapse. Hence, according to Soetewey (2021), this type of regression is suitable for measuring correlation while accounting for the effects of other variables. Since the predictors are hypothesized to be correlated, multicollinearity will be assessed using the Variance Inflation Factor (VIF), with a conservative cut-off of < 5 and a maximum threshold of < 10, and Tolerance values, which should not be close to 0. If multicollinearity is found to be problematic, Structural Equation Modeling (SEM) measures latent constructs, assesses correlations among predictors, and tests the model.

Ethical Considerations

To uphold the ethical standards of this research, several measures were diligently implemented. The confidentiality of participants and the security of their personal responses were always prioritized. Anonymity was carefully maintained throughout the study, with participants providing voluntary, informed consent after receiving a clear explanation of the study's objectives. Findings are presented in a summarized, collective form to protect individual identities. Moreover, participants retained the freedom to withdraw from the study at any stage without facing any negative consequences on their ongoing legal case or participation in CARROTS – Salubong. Participants were allowed to seek clarification and ask questions about any aspect of the study. It is important to emphasize that no deceptive practices were employed in this research. Furthermore, the researcher prioritized the safety and well-being of all participants, implementing necessary precautions to protect them. A comprehensive explanation of any potential risks associated with the study was also provided to participants to ensure their full understanding. All data collected was handled ethically and securely, accessible only to the researcher and the adviser, and used solely for the study's purposes. Any potential conflicts of interest were transparently disclosed to maintain the study's integrity. The research design was also sensitive to cultural considerations, avoiding harm, offense, or bias toward any cultural group. Participants were treated fairly, without discrimination or any form of unjust treatment. The researcher will ensure that the Graduate School - Research and Extension Office reviews the study to ensure compliance with ethical standards. The researcher was responsible for adhering to these principles and to ethical guidelines throughout the study.

Results and Discussion

Level of Self-Stigma

Table 1 presents the level of self-stigma experienced by the respondents in this study, including enacted, anticipated, internalized, and overall self-stigma. The mean for overall Self-Stigma scores 3.16 (SD = 0.35), which lands within the moderate range. This suggests that the respondents experienced a considerable level of stigma with regard to their condition and identity. Even at a moderate level, this rating indicates that self-stigmatizing thoughts and attitudes may affect the respondent's self-image and interactions with others, but they are not

necessarily overwhelming or pervasive across all aspects of their functioning. This result supports the literature by Elkalla et al. (2023), which found that individuals with substance use disorders tend to report significant levels of self-stigma that affect their psychological well-being and social relationships. The moderate rating may be influenced by the dual context of the respondents being both legal offenders and active participants of a recovery program.

Table 1. *Respondents Level of Self-Stigma*

Domains	*M*	*SD*	Interpretation
Enacted Stigma	2.87	0.62	Moderate
Anticipated Stigma	3.70	0.58	Moderate
Internalized Stigma	3.92	0.57	High
Overall Self-Stigma	**3.16**	**0.35**	**Moderate**

As for the three domains of self-stigma, enacted stigma got the lowest mean at 2.87 (SD = 0.62), showing a moderate level of direct discrimination from others. This aligns with the idea that respondents are somewhat aware of, or are knowledgeable about, negative societal reactions around them, but may not experience them intensely. This finding validated the studies by Da Silveira et al. (2018) and Jang et al. (2023), which emphasize that individuals with a drug use history often anticipate judgment more than they experience direct acts of discrimination. The low score may reflect the protective setting of CARROTS-Salubong, which prioritizes safety protocols and community sensitivity. Being surrounded by trained pod leaders, peer groups, and mental health professionals may reduce exposure to overt stigmatization while maintaining awareness of societal biases.

Next on the list is the Anticipated Stigma, with a mean of 3.70 (SD = 0.58), which is also rated as moderate. This score suggests that respondents commonly expect future discrimination or negative judgment from the people around them, even if it hasn't occurred yet. This expectancy could shape their behavior and decisions, such as avoiding social situations or withholding personal information to protect themselves from possible rejection or harm. This is consistent with Rundle et al. (2021), who noted that public discourse surrounding drug use fosters fear of rejection and discrimination even in supportive environments. Although participants in CARROTS-Salubong are actively rehabilitating, they may still internalize fears of being judged in the broader society, particularly upon re-entry.

The highest mean in this table is Internalized Stigma, which scores 3.92 (SD = 0.57), indicating a high level. This indicates that the respondents have deep internalized negative beliefs and stereotypes about themselves and the situation. This kind of form of stigma is more personal and inward-facing, potentially leading to self-blame, low self-esteem, and feelings of shame. This result highlights internalized stigma as the most significant form affecting the respondents, possibly reflecting a deeper, more emotionally impactful experience. This strongly supports the findings of Elkalla et al. (2023), Moore et al. (2019), and Motyka et al. (2022), who consistently note that internalized stigma is the most psychologically damaging form of stigma among drug users. The high score is likely influenced by multiple intersecting identities of the respondents, as substance users, legal offenders, and individuals undergoing treatment. While the CARROTS-Salubong offers intensive psychotherapy (e.g., CBT, expressive therapies, motivational interviewing), the process of self-reflection and emotional unpacking may surface feelings of shame, guilt, and self-blame. The emphasis on "self-awareness" and "self-realization" phases in the program may initially intensify internalized stigma before eventual healing can take place.

Level of Resilience

Table 2 presents the descriptive statistics for respondents' overall resilience. Overall resilience had a mean score of 3.19 (SD = 0.42), which falls within the Established range. This result indicates that respondents generally possess a strong capacity to recover from adversity and adapt positively to the challenges they face. Furthermore, the established level of resilience suggests that respondents are likely to demonstrate emotional strength, problem-solving skills, and coping mechanisms that will help them manage stress and setbacks effectively in their daily lives. This finding reflects a more stable psychological foundation among the respondents, which may serve as a protective factor against potential negative outcomes associated with the stigma or other stressors in their environment, particularly on their recovery journey.

Table 2. *Respondents' Level of Resilience*

Variable	*M*	*SD*	Interpretation
Overall Resilience	3.19	0.42	Established

This result supports the findings of Motyka et al. (2022) and Elkalla et al. (2023), which emphasize that individuals in recovery can develop high resilience over time, especially when supported by therapeutic interventions and community structures. The established level of resilience seen here may be attributed to the structured, psychosocial components of the CARROTS-Salubong. The program's phased approach, beginning with self-awareness, progressing through family, and culminating in community reintegration, intentionally builds personal strength, emotional regulation, and coping skills.

Additionally, this finding may reflect the benefits of a non-punitive, community-based rehabilitation setting, where participants are treated with dignity and actively engage in activities such as cognitive-behavioral therapy, expressive journaling, livelihood training, and spiritual enrichment. These interventions promote a growth-oriented recovery environment, allowing clients to reframe past failures as learning experiences, an essential feature of resilience (Newman & Crowell, 2021; Moore et al., 2019). This suggests that, while these individuals have not yet reached optimal or peak resilience, they are already operating from a psychologically stronger baseline than untreated or isolated populations. Their resilience might also be bolstered by the program's peer support systems, which foster a sense of collective healing and reduce the isolating effects of stigma (Da Silveira et al., 2018).

Level of Risk of Relapse

Table 3 shows the level of risk of relapse experienced by the respondents which also comes with its subdomain such as: anxiety and intention to use drugs, emotionality problems, compulsivity for drug use, positive expectancies and lack of control over drug use, lack of negative expectancy for the drug, insights into one's own drug problem, and the overall risk of relapse. The overall risk of relapse had a mean score of 2.88 (SD = 0.22), indicating a moderate level of risk. This suggests that the respondents are at moderate risk of returning to using illegal substances. Although this level is not guaranteed or does not signify an immediate or high threat of relapse, it still reflects a presence of psychological factors that may increase respondents' vulnerability under certain circumstances or situations. This moderate level of risk is shaped by the combined influence of the various subdomains measured in this variable. This result is consistent with findings from Kassani et al. (2015) and Massah et al. (2018), who documented relapse rates between 60–70% within the first year following treatment, even among those in structured rehabilitation programs. This reinforces the idea that relapse is not necessarily a failure, but a predictable phase in recovery that needs continuous psychological and social support.

Table 3. *Respondents' Level of Risk of Relapse*

Domains	*M*	*SD*	Interpretation
Anxiety and Intention to Use Drug (AI)	2.99	0.49	Moderate
Emotionality Problems (EP)	2.68	0.45	Moderate
Compulsivity for Drug (CD)	2.25	0.71	Moderate
Positive Expectancies and Lack of Control Over Drug (PL)	2.60	0.50	Moderate
Lack of Negative Expectancy for the Drug (NE)	3.25	0.65	High
Lie Scale: Insights into One's Own Drug Problem	3.56	0.62	High
Overall Risk of Relapse	**2.88**	**0.22**	**Moderate**

Next is the subscale Anxiety and Intention to Use Drug (AI), which had a mean score of 2.99 (SD = 0.49), also in the moderate range. This suggests that the respondents occasionally or may sometimes experience anxiety that is connected to thoughts or urges to use illegal drugs. The presence of this anxiety indicates an emotional driver of relapse that may manifest or show during times of stress and discomfort. Respondents may still not constantly feel this anxiety. However, when it arises, it appears sufficiently intense or worse that it can potentially lead to substance-seeking behaviors if not properly managed or guided. Hakimian et al. (2019) support this observation, identifying stress and emotional instability as powerful psychological drivers of relapse, often linked to withdrawal or discomfort. Similarly, Zeng and Wei (2021) highlight that individuals with high emotional distress and low psychological capital tend to have a greater relapse tendency. The therapeutic structure in CARRPOTS-Salubong, including CBT and emotional processing sessions, attempts to mitigate this, but the moderate score may suggest ongoing emotional vulnerability.

Emotionality Problems (EP) scored similarly. It had a mean score of 2.68 (SD = 0.45), which, again, falls within the moderate range, just like the subdomains mentioned earlier. This result reflects that the participants are experiencing moderate difficulty in handling their emotional states, such as mood swings, irritability, and

depressive feelings. This result may contribute to relapse by weakening their emotion regulation and coping capacity. Emotional instability may also create internal pressures that can make their abstinence more difficult, particularly when combined with their environmental or interpersonal stressors. The connection between emotional dysregulation and relapse is further confirmed by Farooq and Riaz (2022), who found that psychological distress is a major determinant of relapse. In combination with low resilience, emotional problems increase the chances of substance reuse, especially during early recovery stages.

Furthermore, the Compulsivity for Drug (CD) subscale showed the lowest mean score across all subdomains at 2.25 (SD = 0.71), which is still considered a moderate level. This result shows that respondents generally experience fewer uncontrollable urges or habitual compulsions to use illegal drugs. While the possibility of compulsivity may still be present, it may not be a dominant feature for their relapse. This could be an encouraging sign that behavioral patterns of drug-seeking are less entrenched among the respondents, though they may still warrant attention, especially in those high-risk situations. According to Zhao et al. (2023), individuals who undergo methadone maintenance and structured treatment programs show improvements in cognitive control, which weakens compulsive drug-seeking tendencies over time. This supports the idea that CARROTS-Salubong behavior modification strategy may be working to interrupt habitual responses.

Next in line is the Positive Expectancies and Lack of Control over Drug (PL), which scores a mean of 2.60 (SD = 0.50). This subdomain continues the trend of moderate levels of interpretation. This shows that the respondents somewhat believe in the pleasurable or beneficial effects of using illegal drugs and may have a limited perceived control over their ability to abstain. These beliefs can undermine respondents' motivation for sustained abstinence, even if they are not overpowering. In contrast, Lack of Negative Expectancy for the Drug (NE) stands out with a higher mean of 3.25 (SD = 0.65) compared to the other subdomain, which is categorized as a high level. This signifies a diminished belief in the negative consequences of illegal drug use. If individuals do not wholeheartedly recognize or accept the risks and possible harms associated with substance use, the chances of relapse are high, especially in the absence of external controls and support. This is aligned with Sharif et al. (2023), who reported that individuals' cognitive biases, especially related to the perceived positive effects of drug use, significantly contribute to the risk of relapse. If plea bargainers still associate drug use with relief or pleasure, their motivation for abstinence is weakened, despite undergoing rehabilitation.

Lastly, the Lie Scale or the Insights into One's Own Drug Problem. This subdomain recorded the highest mean across all at 3.56 (SD = 0.62), also in the high range, just like the previous one. This subdomain assesses the respondent's awareness or knowledge of their drug use problems. A high level of insight or awareness may indicate that the individual acknowledges their struggles and the implications on their substance use. While these kinds of awareness may be beneficial for recovery, they might also be associated with the respondent's self-stigma, guilt, or even internal conflicts, depending on how they processed it, emotionally and psychologically. The coexistence of high insight with moderate relapse risk suggests that respondents may be caught between recognition of their problem and the psychological challenges that prevent full behavioral change. This duality is noted in Moore et al. (2020), who found that self-awareness in recovering drug users often coincides with feelings of shame and internalized stigma. Without interventions that address self-forgiveness and emotional healing, awareness may lead to internal tension instead of behavioral progress.

Relationship Between Risk of Relapse, Self-Stigma, and Resilience

This table presents the correlation matrix between self-stigma and the risk of relapse, along with the domains of each. Self-stigma domains consist of enacted, anticipated, and internalized stigma. While risk of relapse domains are Anxiety and Intention to Use Drug (AI), Emotionality Problems (EP), Compulsivity for Drug (CD), Positive Expectancies and Lack of Control Over Drug (PL), Lack of Negative Expectancy for the Drug (NE), and Insights into One's Own Drug Problem (Lie Scale).

The results revealed a significant weak negative correlation for Internalized Stigma and Compulsivity for Drug (CD) ($r = -0.181$, $p = .002$). This suggests that the individuals who experience higher levels of internalized stigma tend to have slightly lower compulsivity for using illegal drugs. Even though the strength of the relationship is just minimal, it may still mean that individuals who internalize stigma more deeply might also express reduced impulsivity in behaviors related to drug use, possibly due to increased self-awareness or shame. This result partially contradicts earlier literature, where higher self-stigma was generally associated with increased risk of relapse and poor treatment adherence (Moore et al., 2020; Newman & Crowell, 2023). However, the observed

negative correlation might reflect a cognitive mechanism where internalized stigma induces guilt or fear, which temporarily suppresses compulsive drug use behavior. It aligns with the notion that self-stigma could reduce behavior through shame, though at the cost of psychological well-being (Yeung et al., 2021).

Table 4. *Correlation Matrix Among the Domains of Risk of Relapse and Domains of Self-Stigma*

Domains	Enacted Stigma	Anticipated Stigma	Internalized Stigma	Overall Self-Stigma
Anxiety and Intention to Use Drug (AI)	-0.011	0.014	0.035	0.020
Emotionality Problems (EP)	0.037	0.093	-0.043	0.050
Compulsivity for Drug (CD)	-0.006	0.054	-0.181**	-0.073
Positive Expectancies and Lack of Control Over Drug (PL)	0.011	-0.58	-0.010	-0.032
Lack of Negative Expectancy for the Drug (NE)	-0.133*	-0.133*	0.022	-0.141*
Lie Scale: Insights into One's Own Drug Problem	0.021	-0.043	0.033	0.007
Overall Risk of Relapse	-0.020	-0.014	-0.051	-0.048

Note. * p < .05, **p <.01, *** p < .001

Another significant finding is the weak negative correlation between Lack of Negative Expectancy for the Drug (NE) and both Enacted Stigma (r = -0.133, p = .021) and Anticipated Stigma (r = -0.133, p = .021). This result implies that the individuals with fewer negative expectations about their drug use tend to experience less and minimal enacted and anticipated stigma. Although relationships are weak, this may still suggest that a lack of negative beliefs about drug consequences is not connected with lower perceptions of stigma. This result supports prior findings that individuals who lack a strong perception of drug harm tend to minimize both external and anticipated forms of stigma. It corresponds with literature indicating that stigma may be shaped by personal beliefs about drug use consequences (Hendianti & Uthis, 2018). This suggests that when drug use is perceived as less harmful, both societal reactions (enacted stigma) and internal expectations of judgment (anticipated stigma) may be less activated.

Additionally, NE or Lack of Negative Expectancy for the Drug also showed a significant weak negative correlation with Overall Self-Stigma (r = -0.141, p = .015). This showed that the individuals with diminished negative expectations about their drug use may hold less self-stigmatizing beliefs. This could reflect on cognitive dissonance, where their low perceived harm reduces the internal pressure or guilt typically associated with substance use. This finding is consistent with the literature suggesting that individuals' attitudes about drug use shape their internalized stigma. The result validates studies like Kim and Jang (2019), which identified self-perceptions, including self-esteem and perceived harm, as mediators between stigma and recovery outcomes. The lower the perceived risk of drug use, the less internalized stigma individuals may report, which may also reduce emotional conflict related to substance use.

All other relationships between the stigma domains and risk of relapse, including AI, EP, PL, and the Lie Scale, did not show any significant correlations. For instance, Overall Self-Stigma and Risk of Relapse exhibited a very weak and non-significant negative relationship (r = -0.048, p = .412), indicating little to no linear relationship between the two variables. Similarly, correlations between self-stigma and the Lie Scale, which offers insight into how individuals perceive their own drug problem, were not statistically significant. This overall lack of significant correlations may contradict the general trend in the literature that connects self-stigma with increased emotional distress and relapse (Moore et al., 2020; Jan et al., 2022). However, it aligns with Zeng et al. (2021), who cautioned that resilience and relapse are more strongly influenced by social and familial support than by personal stigma alone. This suggests that stigma might exert its effects indirectly, or in combination with other psychosocial factors not captured within the correlation matrix.

These findings suggest that while there are some modest associations between how individuals perceive stigma and certain relapse-related behaviors or cognitions, many of the relationships are weak or non-significant. This may imply that other psychological, environmental, or interpersonal factors could be mediating the relationship between self-stigma and risk of relapse, beyond the scope of the present analysis. This interpretation supports the integrated model proposed in the literature, which emphasizes the need for multifaceted interventions addressing self-stigma, resilience, and relapse risk (Ellingsen et al., 2023; Yamashita et al., 2021). Furthermore, it reinforces the argument that stigma's impact extends beyond individual experience to systemic and contextual factors (Strickland et al., 2023; Budhwani et al., 2017). The lack of strong direct relationships in the data may highlight the complex, multi-layered nature of recovery, requiring attention to resilience-building, peer support, and digital interventions (Schiel et al., 2016).

Table 5 presents the correlation matrix that explores the relationship between overall resilience and several psychological variables associated with drug use. Using the Pearson correlation coefficient, the results indicate that most variables show a very weak relationship with resilience. For instance, a very weak negative correlation was found between resilience and Anxiety and Intention to Use Drug (r = -0.043), as well as with Compulsivity for Drug (r = -0.026), suggesting that higher levels of resilience may be slightly associated with reduced anxiety toward drug use and compulsive drug-seeking behaviors. This weak inverse relationship is partially supported by the findings of Dallas et al. (2023) and Yamashita et al. (2021), who emphasized that resilience helps individuals handle setbacks and maintain emotional control during recovery, thus potentially lowering their anxiety and impulsive tendencies toward drug use. However, the effect sizes in the current analysis are much weaker than those reported in prior literature, possibly indicating that other mediating factors, such as social support (Zeng et al., 2021) or self-esteem (Kim & Jang, 2019), may play a more significant role in reducing these tendencies than resilience alone.

Table 5. *Correlation Matrix Among the Domains of Risk of Relapse and Overall Resilience*

Domains	Enacted Stigma
Anxiety and Intention to Use Drug (AI)	-0.043
Emotionality Problems (EP)	0.020
Compulsivity for Drug (CD)	-0.026
Positive Expectancies and Lack of Control Over Drug (PL)	0.078
Lack of Negative Expectancy for the Drug (NE)	0.050
Lie Scale: Insights into One's Own Drug Problem	0.016
Overall Risk of Relapse	0.031

Note. * p < .05, **p <.01, *** p < .001

On the other hand, Emotionality Problems (r = 0.020), Lack of Negative Expectancy for the Drug (r = 0.050), and Lie Scale: Insights into One's Own Drug Problem (r = 0.016) all yielded very weak positive correlations, indicating that these factors have minimal association with an individual's level of resilience. These findings contradict the work of Jan et al. (2022), who observed that individuals with high resilience were better able to manage emotional stressors, and Farooq and Riaz (2022), who suggested resilience buffered psychological disturbances during recovery. The weak and even positive correlation here implies that resilient individuals might still report emotional problems or distorted perceptions regarding drug use, which may suggest measurement limitations or the presence of confounding psychological variables not accounted for in this model.

Interestingly, the highest correlation observed in the table was between resilience and Positive Expectancies and Lack of Control Over Drug (r = 0.078), which, while still weak, may suggest a slight tendency for individuals with higher resilience to also report stronger positive beliefs about drug use or a lack of control over it. This weak positive relationship appears to contradict existing literature. Resilient individuals are expected to have more adaptive cognitions and behavioral regulation, as indicated by Yamashita et al. (2021) and Ellingsen et al. (2023). The present finding might suggest a dissonance wherein certain individuals maintain psychological resilience in general life domains but still harbor ambivalence or optimism toward drug use, a hypothesis that needs further exploration, possibly through qualitative designs as used by Moore et al. (2020).

Lastly, the correlation between overall resilience and overall risk of relapse was very weak and positive (r = 0.031), indicating a negligible association. This outcome contradicts the findings of multiple studies that positioned resilience as a significant protective factor against relapse (Dallas et al., 2023; Jan et al., 2022; Farooq & Riaz, 2022). It also opposes theoretical assertions from Kim and Jang (2019), who highlighted the mediating role of resilience via self-esteem in relapse prevention. The negligible correlation here may imply that resilience alone, in the absence of supportive external systems (Zeng et al., 2021) or targeted therapeutic interventions (Ellingsen et al., 2023), does not significantly reduce the risk of relapse. It also supports Zeng et al.'s (2021) argument that social and familial support systems could play a larger role than individual resilience in preventing relapse.

Overall, the results imply that there are no strong or statistically significant relationships between resilience and the examined drug-related variables, and any observed associations may be influenced by other external or mediating factors not captured in the current analysis. This conclusion supports Zeng et al.'s (2021) assertion that resilience alone may not be sufficient to counteract relapse tendencies without concurrent psychosocial support. It also aligns with the systemic perspective raised by Tran et al. (2016) and Budhwani et al. (2017), which posits that broader factors, such as systemic stigma, treatment quality, and social inclusion, are critical influences on

relapse outcomes.

Self-Stigma and Resilience as Predictors of Risk of Relapse

This study employed both simple linear regression and multiple regression analysis. Simple linear regression was used to examine whether the significant relationship between internalized stigma and compulsivity for drug use (CD) also indicates a predictive effect. Meanwhile, multiple regression was conducted to determine whether enacted stigma, anticipated stigma, and overall self-stigma can predict the lack of negative expectancy for the drug (NE). The researcher focused on these variables because they showed a significant relationship, as indicated by the Pearson correlation coefficient. This study conducted preliminary assumption checks, including the Durbin-Watson test for autocorrelation, collinearity statistics, and a normality test. To evaluate the regression analysis, the researcher used model fit measures, the omnibus ANOVA test, and model coefficients. These analyses were applied to both simple linear and multiple regression and were presented separately.

Table 6. *Durbin-Watson Test (Autocorrelation) for Internalized Stigma and Compulsivity for Drug (CD)*

Autocorrelation	DW Statistic	*p*
0.319	1.36	<.001

The Durbin-Watson test for Internalized Stigma and Compulsivity for Drug (CD) yielded a DW statistic of 1.36, with a p-value of <.001, indicating significant autocorrelation in the residuals. Since the DW value is not close to 2, it implies a violation of the assumption of independence. The autocorrelation value of 0.319 further supports this, suggesting that the residuals are not entirely independent, which could affect the reliability of the regression estimates. As noted by Wooldridge (2016), autocorrelation undermines the assumption of error independence in regression, potentially biasing standard errors and weakening inference.

Table 7. *Collinearity Statistics Internalized Stigma and Compulsivity for Drug (CD)*

Domain	*VIF*	Tolerance
Internalized Stigma	1.00	1.00

The collinearity statistics further support the inclusion of internalized stigma as a predictor in this analysis. The Variance Inflation Factor (VIF) for internalized stigma is 1.00, with a tolerance value of 1.00. These values confirm the absence of multicollinearity, indicating that the predictor contributes uniquely to the model. This interpretation aligns with Dormann et al. (2013) and Hair et al. (2014), who emphasize that low VIF values (below 5 or 10) and high tolerance (above 0.1) indicate that multicollinearity is not a concern and coefficient estimates are likely to be stable.

Table 8. *Normality Test (Shapiro-Wilk) for Internalized Stigma and Compulsivity for Drug (CD)*

Statistic	*p*
0.963	<.001

However, the Shapiro-Wilk test for normality yielded a statistic of 0.963 and a p-value less than .001, suggesting that the residuals are not normally distributed. Since the p-value is below the 0.05 threshold, the assumption of normality is violated, potentially affecting the interpretation of regression coefficients and significance tests. According to Razali & Wah (2011), the Shapiro-Wilk test is particularly powerful for detecting deviations from normality in small to medium-sized samples, supporting the validity of this test result.

Table 9. *Model Fit Measures for Internalized Stigma and Compulsivity for Drug (CD)*

				Overall Model Test			
Model	***R***	**R Square**	**Adjusted R Square**	***F***	***Df1***	***Df2***	***p***
1	0.181	0.327	0.0295	10.1	1	298	.002

Note. Durbin-Watson = 0.319

Despite some assumption violations, the simple linear regression reveals that internalized stigma has a statistically significant relationship with compulsivity for drug use. The model explains 3.27% of the variance in the dependent variable, as indicated by an R^2 of 0.0327, with an adjusted R^2 of 0.0295, suggesting a small effect size. The F-test for the overall model is significant, $F(1, 298) = 10.1$, $p = 0.002$, indicating that the predictor significantly improves the prediction of the dependent variable. This is consistent with Pallant (2021), who highlights that a significant F-test confirms the predictor's contribution to explaining variance in the outcome variable, even when the explained

variance is relatively modest. While the effect size is small, this aligns with Kim & Jang's (2019) findings, which noted that internalized stigma typically explains a modest but meaningful proportion of variance in treatment outcomes, often mediated by psychological factors such as self-esteem or resilience.

Table 10. *Omnibus ANOVA Test for Internalized Stigma and Compulsivity for Drug (CD)*

Domains	Sum of Squares	*df*	Mean Square	*F*	*p*
Internalized Stigma	5.02	1	5.024	10.1	.002
Residuals	148.47	298	0.498		

This result is supported by the omnibus ANOVA, which shows that internalized stigma has a significant effect ($F = 10.1$, $p = 0.002$). However, the residual sum of squares remains relatively high at 148.47, which suggests that a large portion of the variance in compulsivity for drug use remains unexplained by this model. This resonates with the work of Zeng et al. (2021), who cautioned that while internalized stigma is a key individual predictor, factors such as familial and social support often account for a much greater share of the variance in relapse behavior. Hence, a singular focus on self-stigma might fail to account for significant contextual factors.

Table 11. *Model Coefficients for Internalized Stigma and Compulsivity for Drug (CD)*

			95% Confidence Interval					95% Confidence Interval			
Predictor	**Est.**	***SE***	***L***	***U***	***t***	***p***	**Std. Est.**	***L***	***U***	**Tol.**	***VIF***
Intercept	3.124	0.2796	2.573	3.6739	11.17	<.01					
Internalized Stigma	-0.224	0.0706	-0.363	-0.0853	-3.18	0002	-0.181	-0.293	-0.0688	1.00	1.00

The regression coefficients also demonstrate a statistically meaningful relationship. The coefficient for internalized stigma is -0.224 with a p-value of .002, indicating a significant negative relationship between internalized stigma and compulsivity for drug use. The 95% confidence interval ranges from -0.363 to -0.0853, which does not include zero, further confirming the significance of this effect. The standardized estimate is -0.181, reinforcing the negative association. While the intercept is statistically significant ($\beta = 3.124$, $p < .001$), this simply reflects the average predicted value of the dependent variable when internalized stigma is zero. This inverse relationship echoes findings from Dallas et al. (2023) and Yamashita et al. (2021), who found that individuals with higher internalized stigma report lower resilience and greater difficulty managing relapse triggers, leading to increased compulsive drug-seeking behavior.

While the model meets some but not all statistical assumptions, the findings confirm that internalized stigma, as measured in this study, significantly and negatively predicts compulsivity for drug use among the respondents. This reinforces Pallant's (2021) prior recommendations on the importance of performing assumption checks and addressing violations carefully, particularly in sensitive models exploring psychosocial predictors. The result also supports interventions such as those discussed by Ellingsen et al. (2023), which showed that cognitive-behavioral techniques targeting self-stigma reduction boosted resilience and reduced relapse rates, suggesting potential real-world applications of this model. For the multiple regression, which was also used to determine whether enacted stigma, anticipated stigma, and overall self-stigma can predict the lack of negative expectancy for the drug (NE), a set of assumption checks was also conducted.

Table 12. *Durbin-Watson Test (Autocorrelation) for Enacted Stigma, Anticipated Stigma, and Overall Self-Stigma Towards Lack of Negative Expectancy for the Drug (NE)*

Autocorrelation	DW Statistic	*p*
0.105	1.79	.062

The Durbin-Watson test yielded a DW statistic of 1.79 and a p-value of .062, indicating no significant autocorrelation in the residuals. Since the DW value is close to 2, the assumption of independence is not violated. This contrasts slightly with prior models that reported significant autocorrelation and aligns with Wooldridge's (2016) recommendations, which caution that values approaching 2 indicate independence of residuals and reinforce reliable regression estimates.

The collinearity statistics affirm the appropriateness of the predictors in this analysis. The Variance Inflation Factor (VIF) values for Enacted Stigma Mean (2.00), Anticipated Stigma Mean (2.13), and Overall Self-Stigma Mean (3.33) are all below the commonly accepted threshold of 5. Their corresponding tolerance values are 0.501, 0.470, and 0.301, respectively, all of which exceed the critical threshold of 0.1. These findings indicate that multicollinearity

is not a concern in this model, affirming the independence of the predictors and the stability of the coefficient estimates, in accordance with Dormann et al. (2013) and Hair et al. (2014).

Table 13. *Collinearity Statistics for Enacted Stigma, Anticipated Stigma, and Overall Self-Stigma Towards Lack of Negative Expectancy for the Drug (NE)*

Domain	*VIF*	Tolerance
Enacted Stigma	2.00	0.501
Anticipated Stigma	2.13	0.470
Overall Self-Stigma	3.33	0.301

Table 14. *Normality Test (Shapiro-Wilk) for Enacted Stigma, Anticipated Stigma, and Overall Self-Stigma Towards Lack of Negative Expectancy for the Drug (NE)*

Statistic	*p*
0.988	.013

The Shapiro-Wilk test for normality yielded a statistic of 0.988 and a p-value of .013, suggesting that the residuals deviate slightly from a normal distribution. Since the p-value is below the 0.05 threshold, the assumption of normality is technically violated, though the deviation is minor. This supports the assertion by Razali & Wah (2011) that the Shapiro-Wilk test is highly sensitive in detecting non-normality, especially in medium-sized samples.

Table 15. *Model Fit Measures for Enacted Stigma, Anticipated Stigma, and Overall Self-Stigma Towards Lack of Negative Expectancy for the Drug (NE)*

				Overall Model Test			
Model	*R*	R Square	Adjusted R Square	*F*	*Df1*	*Df2*	*p*
1	0.179	0.320	0.0222	3.26	3	296	.022

Note. Durbin-Watson = 0.105

Despite a small overall effect, the multiple regression analysis revealed a statistically significant model. The R^2 is 0.0320, and the adjusted R^2 is 0.0222, indicating that the predictors together explain 3.2% of the variance in lack of negative expectancy for drug (NE). The overall model is statistically significant, with an $F(3, 296) = 3.26$, $p = .022$, indicating that the inclusion of enacted stigma, anticipated stigma, and overall self-stigma significantly improves the prediction of NE. This aligns with Pallant's (2021) observations, which note that a statistically significant F-test confirms the model's explanatory power even when the explained variance is small. This model is also consistent with findings by Da Silveira et al. (2018), who reported that internalized stigma significantly affects treatment perception and motivation, although typically with modest effect sizes.

Table 16. *Omnibus ANOVA Test for Enacted Stigma, Anticipated Stigma, and Overall Self-Stigma Towards Lack of Negative Expectancy for the Drug (NE)*

Domains	Sum of Squares	*df*	Mean Square	*F*	*p*
Enacted Stigma	1.1596	1	1.1596	2.7963	.096
Anticipated Stigma	1.1048	1	1.1048	2.6641	.104
Overall Self-Stigma	0.0305	1	0.0305	0.0736	.786
Residuals	122.7507	296	0.4147		

The omnibus ANOVA test further supports the model's significance, showing that Enacted Stigma Mean ($F = 2.7963$, $p = .096$) and Anticipated Stigma Mean ($F = 2.6641$, $p = .104$) approached significance. In contrast, Overall Self-Stigma Mean ($F = 0.0376$, $p = .786$) was not significant. These findings suggest that while none of the individual predictors reached conventional significance levels, their combined contribution accounts for a meaningful portion of the variance in NE. This result aligns with broader literature, including Motyka et al. (2022), who showed that stigma often operates in subtle, multifaceted ways that may not be captured by isolated predictors but become evident when analyzed collectively.

Table 17. *Model Coefficients for Enacted Stigma, Anticipated Stigma, and Overall Self-Stigma Towards Lack of Negative Expectancy for the Drug (NE)*

			95% Confidence Interval					95% Confidence Interval			
Predictor	Est.	*SE*	*L*	*U*	*t*	*p*	Std. Est.	*L*	*U*	Tol.	*VIF*
Intercept	3.8971	0.3507	3.207	4.5873	11.112	<.001					
Enacted Stigma	-0.1418	0.0848	-0.309	0.0251	-1.672	.096	-0.1351	-0.294	0.0239	0.501	2.00
Anticipated Stigma	-0.1509	0.0924	-0.333	0.0310	-1.632	.104	-0.1362	-0.300	0.0280	0.470	2.13
Overall Self-Stigma	0.0526	0.1939	-0.329	0.4342	0.271	.786	0.0283	-0.177	0.02336	0.301	3.33

Regression coefficients show that none of the individual stigma predictors are statistically significant at the 0.05 level. Enacted stigma has a coefficient of -0.1418 ($p = .096$), anticipated stigma -0.1418 ($p = 0.104$), and overall self-stigma 0.0526 ($p = .786$). The 95% confidence intervals for each of these predictors include zero, indicating they are not significant. However, the standardized beta for anticipated stigma (-0.1362) suggests a small but potentially meaningful negative association with NE. The intercept is statistically significant ($\beta = 3.8971$, $p < .001$), indicating that when all predictors are zero, the predicted NE score is significantly above zero. While the individual predictors may not be significant on their own, the model's overall significance and standardized estimates suggest avenues for deeper analysis, particularly regarding the nuanced roles of different types of stigma.

In sum, the model satisfies most regression assumptions and demonstrates that the combination of stigma variables significantly predicts negative expectancy, even with a small effect size. This underscores Pallant's (2021) guidance to interpret models with low R^2 cautiously, especially when exploring complex psychosocial variables such as stigma. The study's outcomes are validated by Tran et al. (2016), who found that stigmatizing attitudes across different delivery models of rehabilitation care not only affect recovery success but shape expectations about risk of relapse and future treatment participation.

Proposed Enhancement Program for Community Assisted Recovery and Rehabilitation Outpatient Training Services – Salubong Aftercare

Based on the findings of the study, plea bargainers in drug-related cases were found to have a moderate level of overall self-stigma, with internalized stigma emerging as particularly high. Although resilience levels were established, they showed limited correlation with protective outcomes. The risk of relapse was moderate, but the domains such as lack of negative drug expectancy and insights into one's own drug problem were scored high.

Despite the holistic intention of the CARROTS-Salubong, its Self-Phase lacks targeted psychological tools for addressing deep-seated internalized shame and negative self-beliefs. In response, the Internalized Stigma Reduction and Self-Empowerment Program is proposed. This program incorporates structured cognitive-behavioral reframing, guided storytelling, and identity reclamation workshops. These strategies are intended to help individuals reconstruct a more compassionate self-concept and reduce the shame often tied to drug use. The United Nations Office on Drugs and Crime (UNODC) emphasizes that community-based drug treatment should promote empowerment, be non-judgmental, and be informed by psychological evidence. The program addresses a critical gap in the CARROTS-Salubong Aftercare by focusing directly on internalized stigma, which, if unaddressed, can undermine long-term recovery and increase social withdrawal.

For the Family Phase, the CARROTS-Salubong offers limited intervention in building collective emotional endurance and psychological flexibility within the family context. It primarily focuses on logistical and caregiving support rather than developing adaptive coping mechanisms among family members. Hence, the Adaptive Resilience Skills Enhancement program was developed. Although the respondents showed a relatively established resilience level, reinforcing these capabilities is vital for long-term recovery. This program integrates family-centered approaches such as emotion regulation training, mindfulness-based stress reduction, problem-solving exercises, and collaborative goal setting. These techniques aim to create a resilient familial support system that can absorb and adapt to stressors together. The UNODC (2014) highlights the importance of involving family and social networks in treatment processes, noting that social support serves as a protective buffer against relapse. Therefore, these strengthens what the CARROTS-Salubong Aftercare underdelivers: structured, resilience-building practices that include the emotional development of the family unit, not just the individual.

In the Community Phase, one major weakness of the CARROTS-Salubong is the lack of direct intervention addressing relapse cues and distorted drug-related beliefs, particularly the respondents' moderate scores in compulsivity and a lack of negative expectancy for drug use. These cognitive distortions and behavioral risks are often overlooked in post-treatment care. To bridge this gap, the Real-Life Exposure and Relapse Management program is proposed. This community-based initiative utilizes scenario-based learning, peer testimonials, role-playing, and cognitive restructuring techniques to modify drug-related expectancies and enhance behavioral control in high-risk situations. The UNODC's community-based treatment model advocates for continuity of care, social reintegration, and empowerment through peer-based and experiential learning (UNODC, 2014). By simulating real-world temptations and providing coping tools in a safe learning environment, this program ensures that participants do not merely reenter the community unprepared but are instead equipped with proactive strategies for relapse prevention. This directly addresses a critical missing element in the CARROTS-

Salubong Aftercare, translating clinical knowledge into practical, community-embedded skills.

In sum, these programs present structured and evidence-based programs for the enhancement of CARROTS-Salubong Aftercare. Rooted in both empirical findings and aligned with the UNODC's guidelines for rights-based and non-stigmatizing care, these programs offer a holistic, multi-level strategy for stigma reduction, resilience reinforcement, and relapse prevention. By addressing the CARROTS-Salubong gaps, these interventions aim to support sustainable recovery, community reintegration, and the overall well-being of plea bargainers navigating life after substance use.
The proposed intervention programs are as follows:

Table 18. *Internalized Stigma Reduction and Self-Empowerment Program*

Component	Description
Rationale	The study revealed a moderate level of overall self-stigma, with internalized stigma being the most prominent. This form of stigma often leads to self-blame, reduced self-worth, and disengagement from recovery. As the CARROTS-Salubong lacks focused interventions on psychological shame and self-perception, this addresses this critical need by offering structured support to reduce self-stigmatizing beliefs and promote self-empowerment.
Objectives	1. Raise awareness about nature and impact of internalized stigma. 2. Help participants identify and challenge self-defeating thoughts. 3. Promote healthier self-concepts through narrative and cognitive reframing.
Activities	Psychoeducational workshops on stigma and cognitive distortions, guided storytelling and identity-reclamation sessions, cognitive-behavioral reframing exercises, and art-based self-expression and journaling for self-reflection.
Persons Involved	Psychometricians, psychologists, and social workers.
Resources Needed	Writing and drawing materials, multimedia projector and speakers, printed handouts or worksheets, therapy journals, comfortable venue for group work.
Time Frame	Once a month for 4 months
Success Indicator	Significant reduction in internalized stigma as measured by pre and post-intervention assessments, qualitative feedback showing increased self-acceptance and empowerment.

Table 19. *Adaptive Resilience Skills Enhancement*

Component	Description
Rationale	While resilience levels were found to be relatively stable, the lack of family-centered coping tools in the CARROTS-Salubong presents a barrier to sustaining recovery. Families are often reactive caregivers rather than proactive emotional supporters. This program addresses this by strengthening the resilience of both the plea bargainer and their family through structured emotional skill-building.
Objectives	1. Enhance individual and family-based emotional coping mechanisms. 2. Build collective psychological flexibility and support within the family unit. 3. Equip families with strategies to adapt to stress and maintain recovery support. 4. Strengthen communication, empathy, and problem-solving within households.
Activities	Emotion regulation and mindfulness training, family problem-solving workshops and resilience simulations, group goal setting and vision board creation, structured family dialogue sessions, and Relaxation and stress reduction techniques.
Persons Involved	Psychometricians, psychologists, social workers, and family members.
Resources Needed	Resilience handbooks, activity kits, relaxation/mindfulness media, family workbook packets, quiet and inclusive venue for group families.
Time Frame	Once a month for 4 months
Success Indicator	Increase in resilience scores, improved family cohesion and emotional support indicators based on interviews or structured feedback tools.

Table 20. *Real-Life Exposure and Relapse Management*

Component	Description
Rationale	Respondents exhibited moderate risk of relapse. These distorted beliefs are not sufficiently addressed in the current community-based approaches of the CARROTS-Salubong. This program is a behavioral-cognitive intervention that equips clients with real-life skills to anticipate, recognize, and resist relapse triggers within the community.
Objectives	1. Challenge distorted expectations and normalize the risks associated with drug use. 2. Enhance behavioral control in high-risk or emotionally charged situations.

	3. Improve decision-making and emotional regulation through experiential learning. 4. Promote peer-based accountability and community-based reinforcement.
Activities	Scenario-based simulations of relapse cues and temptation, peer testimonials and lived-experience sharing circles, role-playing refusal skills and high-risk situation management, and cognitive restructuring sessions focused on expectancies.
Persons Involved	Psychometricians, psychologists, and social workers.
Resources Needed	Scenario scripts and props, audio-visual materials, role-play kits, cue cards, behavioral workbooks, community venue for group activities.
Time Frame	Once a month for 4 months
Success Indicator	Decrease in compulsivity and distorted expectancy scores on risk of relapse, increased confidence in handling real-world drug-related situations (self-report and facilitator evaluations).

Conclusion

The respondents in this study exhibited a moderate level of enacted stigma. In contrast, high levels were recorded for both anticipated and internalized stigma, indicating that the plea bargainers in drug-related cases not only anticipate discriminatory treatment from others but also internalize negative beliefs about themselves and their situation. Overall, self-stigma scores are moderate, indicating the presence of self-stigmatizing beliefs among participants.

In terms of the next variable, resilience. The respondents demonstrated an established level of resilience. This level suggests a fair degree of personal strength and adaptability in how they face their challenges related to their recovery journey. The overall risk of relapse among the respondents in this study was moderate. Specific domains such as Anxiety and Intention to Use Drug, Emotionality Problems, Compulsivity for Drug Use, Positive Expectancies, and Lack of Control demonstrate a moderate level as well, showing multiple dimensions for respondents' relapse vulnerability. Notably high levels were observed in domains such as Lack of Negative Expectancy and Lie Scale, which possibly indicates a concerning gap in their recognition of the harmful effects of drug use and possible lack of insight into one's own drug-related problem.

The correlation analysis revealed weak but significant negative relationships between internalized stigma and compulsivity for drug use, as well as between various dimensions of self-stigma and the lack of negative expectancy for the drug. These findings suggest that individuals with higher stigma levels may exhibit slightly lower compulsive tendencies and a greater awareness of drug-related risks. However, the overall self-stigma showed a very weak and non-significant relationship with the overall risk of relapse, indicating that stigma alone may not meaningfully influence relapse vulnerability in this context. The analysis showed no significant correlations between overall resilience and any domain of relapse risk, with all relationships falling within the very weak range. The highest observed correlation, between resilience and both positive expectancies and lack of control over drug use, was minimal, suggesting that resilience may not play a substantial role in influencing relapse-related tendencies among the respondents.

Regression analysis revealed that internalized stigma significantly and negatively predicted compulsivity for drug use, suggesting that higher levels of internalized stigma are slightly associated with lower compulsive drug behaviors. However, the model accounted for only a small portion of the variance, indicating that while the relationship is statistically significant, internalized stigma alone is not a strong predictor of compulsive drug use among the respondents. The multiple regression analysis indicated that, collectively, enacted stigma, anticipated stigma, and overall self-stigma significantly predicted lack of negative expectancy for the drug. Although none of the individual predictors reached statistical significance, the model showed a small yet meaningful effect. This suggests that the combined influence of these stigma dimensions may shape how individuals perceive the potential harm or risk associated with drug use.

The researcher developed three programs to enhance the CARROTS-Salubong Aftercare based on the assessed needs of the respondents. These include the Internalized Stigma Reduction and Self-Empowerment Program, designed to help participants overcome self-stigmatizing beliefs. The Adaptive Resilience Skills Enhancement program aims to build emotional strength and coping strategies. Lastly, the Real-Life Exposure and Relapse

Management program focuses on preparing individuals to handle real-world triggers and maintain recovery. Together, these interventions offer a more comprehensive and responsive support system for individuals in rehabilitation.

Contributions of Authors

Author 1: conceptualization, research design, data gathering, data analysis, interpretation of results, manuscript writing, and revision
Author 2: research supervision, methodological guidance, critical review of the manuscript, and final approval of the manuscript

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