IJRAR.ORG E-ISSN: 2348-1269, P-ISSN: 2349-5138

INTERNATIONAL JOURNAL OF RESEARCH AND ANALYTICAL REVIEWS (IJRAR) | IJRAR.ORG

An International Open Access, Peer-reviewed, Refereed Journal

EMOTIONAL AND COPING MECHANISMS AS PREDICTORS OF RELAPSE IN ALCOHOL AND SUBSTANCE USE DISORDERS

[1]Ann Zenobia Abraham, [2] Dr. Diganta Baishya,

[1]Master's Student, [2]Assistant professor,

[1]Department of Psychology

[1]Kristu Jayanti (Deemed to be) University, Bengaluru, India

Abstract

This chapter examines emotional regulation and coping mechanisms as predictors of relapse in alcohol- and substance-use disorders among individuals in residential rehabilitation in Bengaluru. The study is grounded in the view that detoxification alone does not ensure recovery because many individuals enter a vulnerable post-detoxification phase marked by depression, anxiety, stress, and limited adaptive coping resources. Using a quantitative correlational design, data were collected from 30 adults in rehabilitation through the Depression, Anxiety, and Stress Scale (DASS-21), the Emotion Regulation Questionnaire (ERQ), and the Brief-COPE Inventory. The findings indicate moderate levels of depression, anxiety, and stress in the sample, a high reliance on expressive suppression, and stronger dependence on substance-use coping than active coping. Correlational results showed a negative relationship between cognitive reappraisal and depression, and a positive relationship between expressive suppression and anxiety, suggesting that adaptive emotion regulation may buffer relapse vulnerability whereas maladaptive suppression may intensify it. The chapter highlights the role of sociocultural pressures, stigma, and coping deficits in shaping relapse risk and argues for treatment approaches that strengthen emotional processing, distress tolerance, and adaptive coping in recovery settings.

Keywords: *Emotional Regulation, Coping Mechanisms, Relapse, Substance-Use Disorders, Rehabilitation*

CHAPTER I: INTRODUCTION

1.1 Overview of the study

Addiction, now classified as Alcohol and Substance-Use Disorders (AUD/SUD), extends beyond a clinical diagnosis or medical condition. It significantly impacts individuals and their social environments. Historically, addiction was narrowly viewed as a physiological issue involving chemical and neurological alterations, treatable through substance removal. Medical and familial interventions primarily focused on detoxification, assuming that physical cleansing would guarantee recovery. However, this approach neglects the complex psychological experiences of individuals and the factors contributing to relapse after detoxification.

Contemporary clinical understanding acknowledges that overcoming physiological dependence represents only the initial phase of recovery. The principal challenge in addiction is maintaining abstinence rather than cessation. Persistently high relapse rates, occurring weeks to years after detoxification, indicate substantial psychological and emotional deficits. This deficiency in rehabilitative care is conceptualised as the "Relapse Gap."

The Relapse Gap denotes the unstable post-detoxification period during which individuals are physically sober yet emotionally depleted. Removal of the substance eliminates their primary neurologically conditioned coping mechanism. Consequently, recovering individuals face unmediated psychological distress, including depression, anxiety, and generalised stress. This research posits that addiction fundamentally constitutes an emotional regulation disorder masked as a substance use problem. Investigating how individuals regulate or fail to regulate internal emotional turbulence during early abstinence and alcohol- and substance-use disorders (AUDs and SUDs) is a topic of interest. These conditions are chronic, relapsing conditions that impose substantial burdens on individuals, families, and society. Beyond immediate physical and psychological harms, these disorders contribute to long-term disability, increased morbidity and mortality, and exacerbate social and economic inequalities. Relapse, defined as the return to problematic substance use following abstinence or reduction, is prevalent and frequently leads to prolonged suffering and recovery challenges. Identifying predictors of relapse is therefore a central clinical and scientific priority, as it enables targeted prevention, informs personalised intervention strategies, and guides resource allocation within public health systems. public health systems.

Relapse is multi-determined. Biological vulnerabilities, environmental stressors, social determinants, and psychiatric comorbidities interact to shape trajectories of substance use and recovery. Among these, affective processes—how individuals experience, interpret, and manage emotions—play a critical role. Emotional regulation (ER) and coping mechanisms are central to the way people respond to stress, cravings, and triggers for substance use. Dysregulated emotion and maladaptive coping strategies can amplify risk states and reduce the effectiveness of treatment, while adaptive regulation and constructive coping can bolster resilience and sustain abstinence. Despite the conceptual centrality of these constructs, key gaps remain in how they are operationalised, measured, and integrated into predictive frameworks for relapse across diverse populations and substance classes.

This introduction presents the conceptual foundations, rationale, scope, and objectives of a mixed-methods investigation into emotional regulation and coping mechanisms as predictors of relapse in AUDs and SUDs. It delineates the theoretical frameworks guiding the inquiry, defines construct boundaries and categories, situates the study within clinical and policy contexts, and articulates primary research aims and hypotheses. Detailed methodology and a comprehensive literature review are reserved for subsequent sections; the current focus is on establishing a coherent, comprehensive, and actionable conceptual framework that positions ER and coping as central predictors of relapse.

1.2 Background of the Study

The background of this study must contextualise the biopsychosocial pressures that drive initial substance use and subsequent recidivism. Globally, the psychological burden of modern living has escalated, but this transition is particularly pronounced within India's socio-economic and cultural fabric. As a rapidly developing nation, India is currently navigating a profound collision between deeply rooted traditional values and aggressive, hyper-competitive modernisation.

This conflict is particularly evident in metropolitan hubs such as Bengaluru. Known as the "Silicon Valley of India," Bengaluru exemplifies the intense stressors associated with rapid urbanisation. The demographic navigating this environment—young to middle-aged professionals—faces relentless performance pressures. The corporate landscape is characterised by extended working hours, intense global time-zone synchronisation, and competitive performance metrics. Simultaneously, the traditional Indian joint-family system, which historically provided robust collective emotional support, is fragmenting into isolated nuclear units in these urban centres.

This isolation breeds a unique brand of psychological distress. In the absence of community support and healthy emotional outlets, the consumption of alcohol and illicit substances has drastically shifted from a culturally sanctioned recreational activity to a desperate, maladaptive coping mechanism. For the urban Indian professional, the substance acts as an emotional "numbing agent"—a necessary psychological crutch utilised to mute anxiety, combat professional burnout, and temporarily escape the crushing expectations of urban life. When these individuals inevitably cross the threshold from use to dependence and enter residential rehabilitation, they carry this immense psychological baggage with them. Merely locking them away from the substance for 21 or 90 days does not erase the high-pressure environment waiting for them upon discharge, nor does it magically equip them with the cognitive skills required to survive it.

Addiction has traditionally been viewed through a strictly pharmacological and biomedical lens, characterised primarily by the physiological dependence on a substance and the ensuing neurobiological adaptations. Under this traditional paradigm, the focus of clinical intervention is heavily skewed toward medical detoxification and the management of acute withdrawal syndromes. Yet, the chronically high rate of recidivism—often occurring long after the physiological dependence has been broken—points unequivocally toward a deeper, underlying psychological deficit. If addiction were merely a chemical dependency, successful detoxification would equal a cure; however, clinical realities demonstrate that the cessation of substance use is merely the precursor to the actual psychological work of recovery.

In contemporary India, this psychological deficit is intensified by rapidly evolving sociocultural dynamics. In hyper-competitive, fast-paced urban environments such as Bengaluru, individuals face relentless professional and social pressures. The drive to perform, combined with the erosion of traditional community support systems, often results in psychological isolation. Consequently, alcohol and illicit substances shift from culturally sanctioned recreational use to maladaptive psychological crutches employed to modulate stress, reduce anxiety, and temporarily escape urban professional demands. Rehabilitation thus involves not only chemical detoxification but also the loss of a primary survival mechanism.

1.3 The Relapse Gap

Medically supervised detoxification effectively removes toxins and stabilises physical health, but inadvertently creates the "Relapse Gap." This term describes the vulnerable period immediately following acute withdrawal, during which an individual is physically sober yet emotionally depleted. The substance, previously serving as an artificial emotional regulator, is removed without the establishment of adaptive psychological coping mechanisms.

During this critical period, the inability to manage, process, or identify complex emotions generates a dangerous "pressure cooker" effect within the psyche. Patients often experience intense, unfiltered affective states, including severe depression, acute anxiety, irritability, and emptiness. Neurological conditioning predisposes the brain to seek chemical relief for psychological distress (cognitive priming), intensifying this pressure. Without targeted psychological interventions addressing emotional regulation, individuals are likely to revert to the only familiar pressure-release mechanism: substance use. This research is founded on understanding and bridging the Relapse Gap by examining coping with internal emotional turbulence.

Conceptual definitions and boundaries

Clear conceptualisation of core constructs is vital to coherent inquiry. The following working definitions establish the boundaries for the present research:

Alcohol- and substance-use disorders (AUDs/SUDs): Clinical syndromes characterised by a problematic pattern of substance use leading to clinically significant impairment or distress. These encompass a spectrum from mild to severe presentations across substances, including alcohol, opioids, stimulants, cannabis, benzodiazepines, and others.

Relapse: A return to problematic substance use after a period of abstinence or marked reduction in use. For conceptual purposes, relapse is considered multidimensional, encompassing the timeline (early vs. late post-treatment), frequency (single lapse vs. sustained return), intensity (amount and pattern of use), and consequent harms.

Emotional regulation (ER): The processes by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions. ER spans automatic and controlled processes, and includes strategies such as cognitive reappraisal, suppression, acceptance, and problem-solving. Dysregulation refers to patterns characterised by poor emotional awareness, inflexibility in strategy

deployment, excessive reliance on maladaptive strategies, and difficulty modulating intensity and duration of emotional responses.

Coping mechanisms: The cognitions and behaviours employed to manage internal states (thoughts, emotions) and external demands perceived as taxing or exceeding available resources. Coping can be classified along several dimensions: problem-focused vs. emotion-focused; approach vs. avoidance; adaptive vs. maladaptive; and individual vs. social. While ER overlaps with coping in managing emotional states, coping is broader and includes actions directed at situational problems.

Predictors: Variables measured before relapse that have statistical and practical utility in forecasting relapse risk. In this study, predictors are primarily ER-related processes and coping strategies, considered alongside contextual moderators (e.g., stress exposure, social support) and individual moderators (e.g., comorbid psychopathology).

Three converging reasons justify the primary focus on emotional regulation (ER) and coping mechanisms:

a) Proximal role in relapse pathways: Emotional states, including negative affect (e.g., anxiety, depression, anger) and stress, serve as immediate antecedents to craving and substance use. Individuals' appraisal and response to these states—via regulation strategies and coping behaviours—can either precipitate substance use or promote adaptive alternatives. Therefore, ER and coping operate at a proximal point in relapse cascades and represent modifiable targets.

b) Cross-cutting relevance across substances and populations: Unlike pharmacological or substance-specific risk factors, ER and coping processes are psychologically universal, providing a transdiagnostic perspective. They function across various substances, age groups, and cultural contexts, facilitating the broader applicability of findings and intervention strategies targeting shared mechanisms.

c) Clinical modifiability and intervention potential: Evidence-based psychotherapeutic interventions (e.g., cognitive-behavioural therapy, dialectical behaviour therapy, acceptance and commitment therapy) explicitly target improvements in ER and promote adaptive coping. Demonstrating predictive links between these processes and relapse would support tailoring and intensifying these components in treatment, guide booster-session timing, and inform personalised relapse-prevention planning from an integrative perspective.

a) Stress and coping theory (Lazarus & Folkman): This model posits that individuals' appraisal of stressors and the coping strategies they deploy determine adaptation. Coping strategies can be problem-focused (directly addressing the stressor) or emotion-focused (managing emotional responses). In the context of SUDs, stress appraisals and emotion-focused (particularly avoidant) coping may increase relapse risk by sustaining negative affect or reducing effective problem resolution.

b) Emotion regulation process model (Gross): Gross distinguishes antecedent-focused strategies (e.g., situation selection, cognitive reappraisal) from response-focused strategies (e.g., suppression). The adaptiveness of strategies varies by context and flexibility; rigid reliance on suppression, for example, is associated with poorer outcomes. In SUD populations, deficits in antecedent regulation and overreliance on response-focused suppression or maladaptive strategies may increase vulnerability to relapse.

c) Self-medication and affect regulation models: These perspectives propose that substances are used to manage dysphoric moods or negative affect. Individuals with poor ER may preferentially use substances to down-regulate unwanted affect, linking ER deficits mechanistically to initiation and relapse.

d) Relapse prevention and cognitive-behavioural models (Marlatt & Gordon): These models emphasise the role of high-risk situations, coping deficits, outcome expectancies, and the abstinence violation effect in relapse. Coping skills and self-efficacy are central protective factors; their absence elevates relapse risk.

e) Dual-process and neurocognitive models: These models posit interaction between impulsive, affect-driven processes and reflective, control-oriented processes. ER and coping can be conceptualised as reflective systems' tools to modulate impulsive tendencies; when reflective capacity is compromised by stress, fatigue, or neurobiological deficits, relapse risk increases.

Synthesising these frameworks suggests a dynamic model: stressors and cues trigger affective responses; ER and coping processes modulate these responses; when modulation is insufficient or maladaptive, craving and impulsive substance use are more likely; contextual factors (social support, environmental cues) and individual differences (comorbidity, cognitive control) moderate these pathways.

Conceptual model and hypotheses

Drawing on the above frameworks, the conceptual model for the research centres on ER and coping as proximal predictors of relapse, moderated by contextual and individual factors, and potentially mediated by craving and self-efficacy.

Core constructs and hypothesised relationships:

- Baseline ER capacity (e.g., emotional awareness, clarity, regulation flexibility) → lower relapse risk.
- Predominant coping styles:
- Adaptive coping (problem-focused, approach-oriented, social support) → lower relapse risk.
- Maladaptive coping (avoidant, disengagement, substance use as coping) → higher relapse risk.
- Interaction effects:
- High ER capacity may buffer the negative impact of stress on relapse.
- High perceived stress and low social support may amplify the adverse effects of maladaptive coping.
- Mediators:
- Craving intensity and frequency, and reductions in self-efficacy, mediate the relationship between ER/coping and relapse.

- Moderators:
- Psychiatric comorbidity (e.g., mood and anxiety disorders), cognitive control deficits, and environmental cues (e.g., high-risk contexts) moderate the strength of associations.
- From this model arise specific hypotheses (stated in conceptual form, not methodological test descriptions):
- Individuals with greater ER deficits are at elevated risk of earlier and more frequent relapse episodes after treatment or abstinence compared to individuals with better ER.
- Predominant reliance on avoidant or emotion-focused coping strategies predicts higher relapse risk, while problem-focused and social support-seeking coping predict lower relapse risk.
- The combination of ER deficits and maladaptive coping synergistically increases relapse risk beyond the additive effects of each alone.
- Craving and diminished self-efficacy will partially mediate the pathway from ER/coping to relapse.
- External stressors and low social support will strengthen the predictive value of maladaptive ER and coping, indicating important interaction effects.

Rationale for a mixed-methods approach

Understanding relapse requires both breadth and depth. Quantitative analyses can establish the strength and rationale for a Mixed-Methods Approach. Understanding relapse requires both breadth and depth. Quantitative analyses establish the strength and direction of associations among ER, coping, and relapse across samples and timeframes. At the same time, qualitative inquiry elucidates lived experiences, contextual nuances, subjective meanings, and mechanisms underlying statistical associations. Combining these perspectives yields clinically salient and actionable insights: quantitative predictors are contextualised by a qualitative understanding of when and why strategies fail or succeed, and qualitative themes refine operational definitions and intervention targets. This integrated approach is especially valuable for translating findings into practice, developing person-centred interventions, and comprehending heterogeneity in relapse pathways. An integrative examination of ER and coping:

- Heterogeneity in operationalisation: Emotional regulation and coping are measured and conceptualised variably, limiting comparability across studies and hindering integration into coherent predictive models.
- Limited attention to dynamic processes: Many studies employ cross-sectional or coarse longitudinal designs that inadequately capture temporal dynamics through which momentary affect and coping responses precipitate relapse.

- Underexplored interactions and mechanisms: The interplay among ER, coping, craving, self-efficacy, and environmental contexts remains insufficiently modelled, limiting predictive and preventive capabilities in real-world settings.

- Lack of transdiagnostic and substance-general analyses: Research frequently targets single substances or specific clinical populations; broader transdiagnostic examinations of ER and coping as common mechanisms could improve generalizability and intervention scalability.

- Practical translation gaps: Despite documented associations, translation into tailored clinical strategies (e.g., prioritising specific ER skills for particular individuals and timing) remains incomplete.

Addressing these gaps through a study that integrates conceptual clarity, temporal sensitivity, and contextual richness has the potential to improve predictive accuracy and to inform pragmatic interventions that reduce relapse-related harms.

Operational Scope, Aims, and Research Questions

Scope: This study focuses on adults diagnosed with AUDs or SUDs who have attained abstinence or reduced use and remain at risk of relapse. The emphasis is on psychological predictors—emotional regulation and coping mechanisms—and their interactions with craving, self-efficacy, stress exposure, and social support. Although biological and pharmacological factors are acknowledged, the study prioritises psychosocial mechanisms amenable to behavioural intervention.

Primary aim: To elucidate how emotional regulation capacities and coping mechanisms predict relapse trajectories in individuals with AUDs and SUDs, and to delineate proximal and contextual mechanisms mediating and moderating these relationships.

Secondary Aims:

- To characterize profiles of emotional regulation and coping that confer differential relapse risk.

- To identify contextual and individual moderators that influence the strength of these predictive relationships.

- To generate practice-oriented recommendations for tailoring interventions based on emotional regulation and coping profiles.

Significance and Potential Contributions

Scientific Contribution:

- This study aims to advance theoretical understanding by articulating and testing an integrative, mechanism-oriented model linking emotional regulation, coping, and relapse.

- By parsing emotional regulation into distinct facets and mapping coping repertoires, this work seeks to refine constructs often used heterogeneously, thereby aiding future research comparability.

Clinical and Therapeutic Contribution:

- Identifying emotional regulation and coping profiles that predict relapse can inform screening tools to triage patients into varying levels of relapse prevention intensity.
- Findings can inform treatment content (which emotional regulation skills to prioritize), timing (optimal booster sessions), and modality (group versus individualized interventions), ultimately contributing to more personalized care.
- Qualitative insights can enhance patient-provider communication by highlighting patient-valued strategies and perceived barriers.

Policy and Public Health Contribution:

- Demonstrating that modifiable psychosocial processes predict relapse can support funding and policy decisions prioritizing psychosocial components of substance use disorder care.
- Results may inform workforce training priorities by emphasizing competencies in teaching emotional regulation skills and adaptive coping within addiction services.

Social equity and systems-level implications: By examining contextual moderators (e.g., social support, stressors related to socioeconomic status), this study can illuminate systemic contributors to relapse and inform structural interventions such as community supports and policy measures targeting stress mitigation.

Ethical Considerations

Research involving populations with AUDs and SUDs entails specific ethical considerations that require conceptual acknowledgement:

- Vulnerability and capacity: Participants may experience impaired decision-making capacities; therefore, informed consent processes must ensure comprehension and voluntariness.
- Confidentiality and stigma: Due to the stigma associated with substance use, robust privacy and data security protections are essential to prevent harm.
- Safety monitoring: The study population may be at risk for relapse, overdose, or suicidal ideation; thus, mechanisms for timely identification and response to adverse events are ethically imperative.
- Benefit and reciprocity: Participant involvement must be balanced with potential benefits, such as providing referrals to treatment, resources, or immediate aid when risk is identified.

- Cultural competence: Emotional regulation and coping are embedded within cultural norms; ethical engagement requires culturally sensitive instruments, interpretation, and dissemination practices.

Delimitations and Assumptions

Delimitations (Scope Exclusions):

- Biological, genetic, and neuroimaging predictors of relapse are acknowledged but not the primary focus of this study.
- This study does not evaluate the efficacy of specific pharmacological treatments; instead, it focuses on psychosocial predictors relevant across treatment modalities.
- Although diverse substances and populations are of interest, sampling is restricted to adults to maintain conceptual clarity; findings may not generalise to adolescent or geriatric populations without further research.

Assumptions:

- Emotional regulation and coping mechanisms are sufficiently stable and measurable to function as predictors within the study's temporal framework.
- Self-reported accounts of coping and affective experiences, despite potential biases, provide meaningful insights when complemented by contextual and triangulated data. Relapse processes are influenced by both proximal psychological mechanisms and distal contextual factors; this complexity can be effectively modelled. *Anticipated Challenges and Mitigation Strategies*

Several foreseeable challenges bear conceptual acknowledgement. Heterogeneity in substance use presentations and recovery pathways complicates prediction and translation. Mitigation involves adopting transdiagnostic frameworks that focus on shared mechanisms rather than substance-specific features.

- Measurement variability and construct overlap: ER and coping overlap conceptually, risking multicollinearity. Mitigation: careful specification of the construct and clear delineation of facets will be necessary.
- Temporal dynamics and causality: Emotional processes fluctuate rapidly, making it challenging to establish temporal precedence. Mitigation: multi-timescale conceptual framing (distinguishing trait vs. state processes) and attention to momentary versus dispositional predictors. Context dependence: Coping that is adaptive in one context may be maladaptive in another. Mitigation: emphasise flexibility and context sensitivity in conceptualization—e.g., flexibility in regulation as a key protective factor.

Ethical Dissemination

Findings should be communicated to reduce stigma, promote patient empowerment, and inform clinical practice. This involves emphasising modifiable mechanisms rather than moralising vulnerability, offering practical recommendations for clinicians, and advocating for system-level supports such as access to psychosocial interventions. Dissemination to stakeholders—including clinicians, policymakers, and affected communities—should be prioritised to maximise public health impact.

Relapse in AUDs and SUDs remains a core challenge for individuals and health systems worldwide. Emotional regulation and coping mechanisms occupy a strategically important position in relapse pathways: they are proximal to affective triggers, cross-cutting across substances, and amenable to psychosocial intervention. An integrative investigation—conceptually framed by stress and coping theory, emotion regulation models, relapse prevention frameworks, and dual-process perspectives—can elucidate how specific ER facets and coping repertoires predict relapse trajectories, interact with contextual moderators, and operate through mediators such as craving and self-efficacy. By clarifying these mechanisms, the field can move toward more precise prediction, personalised prevention, and more effective interventions that reduce the human and social costs of relapse. This study intends to contribute to that translational arc by providing a theoretically grounded, practically oriented examination of ER and coping as central predictors of relapse, and by generating insights that inform both clinical practice and public health strategies.

1.3.1 The Role of Emotional Regulation in Relapse Prevention*(Note: Adapted from your outline to fit your actual thesis topic).*

The evolution of Relapse Prevention (RP) as a clinical discipline further justifies the study's background. In the 1980s, under the pioneering work of researchers like G. Alan Marlatt, RP focused heavily on behavioral avoidance. Patients were taught to identify external "triggers" specific people, places, and things associated with their drug use and avoid them. While foundational, this model proved insufficient for long-term sobriety.

Modern clinical psychology recognises that the most dangerous triggers are not external, but internal. Emotional regulation is the continuous, dynamic process by which individuals influence which emotions they experience, when they experience them, and how they experience and express them. In the context of AUD/SUD, chronic substance abuse physically damages the prefrontal cortex—the brain's executive control centre responsible for this regulation.

When a recovering patient encounters a stressor, they lack the neurological hardware to process it healthily. Instead of experiencing temporary sadness or manageable anxiety, they experience catastrophic emotional dysregulation. The brain, remembering that the quickest way to end psychological pain is through chemical intervention, initiates a severe craving. Therefore, the ability to regulate emotions—specifically through active cognitive reframing rather than passive suppression—is no longer viewed as an optional therapeutic luxury. It is a mandatory neurological requirement for preventing the brain from defaulting to substance use when faced with inevitable environmental stressors.

1.3.2 Societal Stigma, Family Enmeshment, and Help-Seeking in the Indian Context

A critical component of the background is the specific barrier to emotional regulation in India: societal stigma. The act of seeking psychiatric help, or even admitting to emotional vulnerability, is deeply stigmatised. Addiction is overwhelmingly viewed not as a biopsychosocial disease, but as a severe moral failing and a sign of weak character that brings profound shame upon the entire extended family.

Because the Indian psychological landscape is deeply collectivist, emotional expression is closely tied to family reputation. There exists a pervasive cultural mandate to "be strong" and maintain a successful public facade. Consequently, when a patient experiences severe depression and anxiety inherent to the "Relapse Gap," they are socially conditioned to hide it. The family often colludes in this secrecy to protect their social standing. This forces the patient to rely on "Expressive Suppression"—the conscious burying of emotional pain. This environment of toxic stoicism and codependent secrecy practically guarantees that the patient will not seek appropriate psychological help when cravings arise, leading directly to the high relapse rates observed in Indian rehabilitation centres.

1.4 Theoretical Framework

To systematically and scientifically investigate the psychological mechanics of relapse, this study is anchored in two foundational, highly validated psychological paradigms: The Modal Model of Emotion and the Stress-Coping Paradigm.

The Modal Model of Emotion (James Gross, 1998). James Gross revolutionised the clinical understanding of affect by positing that emotions are not static, monolithic events that simply "happen" to an individual. Rather, they are dynamic, sequential processes that unfold over time. The Modal Model dictates that the emotion generative process follows a specific trajectory: *Situation*, *Attention*, *Appraisal*, and *Response*.

The clinical brilliance of this model lies in its assertion that an individual can intervene and regulate their emotions at various distinct points along this timeline. These intervention points dictate the difference between sobriety and relapse.

- **Antecedent-Focused Regulation (Cognitive Reappraisal):** This occurs early in the process, before the emotion is fully generated. Cognitive Reappraisal involves altering the trajectory of an emotional response by fundamentally changing how one thinks about the situation. For a recovering addict, this means cognitively reframing a severe craving not as a permanent, agonising state of deprivation, but as a temporary, manageable neurobiological spike that will pass.

- **Response-Focused Regulation (Expressive Suppression):** This occurs late in the process, after the emotion has already peaked. Expressive Suppression involves the deliberate attempt to inhibit or hide ongoing emotion-expressive behaviour. The theoretical framework hypothesises that this is highly taxing on the addict's cognitive resources and results in a "pressure cooker" effect, wherein the trapped emotion fuels autonomic hyperarousal (anxiety) and eventually forces a behavioural relapse.

The Transactional Model of Stress and Coping (Lazarus & Folkman, 1984). Running parallel to Gross's model is the Stress-Coping Paradigm. Lazarus and Folkman defined "Stress" not as an objective external force, but as a highly subjective, dynamic transaction between the individual and their environment. Stress occurs precisely when an individual evaluates that their available "Coping Resources" are insufficient to meet the "Environmental Demand."

In the context of this study, the environmental demand is the monumental task of maintaining sobriety while navigating the pressures of Bengaluru. Coping resources are the behavioural and cognitive strategies an individual utilises. This framework categorises coping into two broad dimensions:

- **Active/Approach Coping:** Taking concrete, problem-focused steps to remove or circumvent the stressor (e.g., seeking instrumental support, planning).
- **Avoidant Coping:** Attempting to escape the stressor through denial, behavioural disengagement, or, most critically, Substance Use.

By integrating these two frameworks, this study theorises a precise chronological pathway to relapse: The urban Indian environment provides the *Stress* (Lazarus). Because of cultural stigma, the patient attempts to manage this stress via *Expressive Suppression* (Gross). This suppression fails to neutralise the distress, overwhelming the patient's *Active Coping* resources (Lazarus). Consequently, the brain defaults to its most potent *Avoidant Coping* mechanism—the substance—resulting in a relapse.

1.4 Statement of the Problem

Despite significant advancements in psychiatric pharmacology and the proliferation of residential rehabilitation centres across urban India, the rate of relapse among individuals diagnosed with Alcohol and Substance-Use Disorders (AUD/SUD) remains catastrophically high. The contemporary Indian medical model is highly proficient at executing acute medical detoxification—the physical stabilisation and removal of the chemical substance from the patient's biological system. However, clinical observation and longitudinal recidivism rates indicate a profound systemic failure in addressing the immediate aftermath of this detoxification.

The core problem is the existence of the "Relapse Gap": a highly volatile psychological window wherein the patient is physically sober but emotionally dysregulated, stripped of their primary coping mechanism (the substance), and left cognitively defenceless against the environmental stressors of daily life. In the high-pressure, fast-paced urban environment of Bengaluru, patients are routinely discharged back into the exact socio-economic and familial environments that catalysed their addiction, yet they are armed with little more than behavioural refusal skills.

Furthermore, this psychological deficit is compounded by a toxic sociocultural mandate. The Indian patient is frequently subjected to intense societal stigma and familial pressure to "be strong" and maintain a facade of recovery, effectively forcing them to utilise maladaptive Expressive Suppression to hide their internal depression and anxiety. Therefore, the exact problem this study seeks to address is that standard rehabilitation

protocols are attempting to treat a profound emotional regulation deficit with mere physical isolation and willpower. Without a quantifiable understanding of how specific emotion regulation strategies and coping mechanisms predict the likelihood of returning to substance use, clinical interventions will remain superficial, and the cycle of chronic relapse will persist unhindered.

1.5 Aim and Objectives

Aim of the Study:

The primary aim of this research is to systematically investigate the predictive role of emotion regulation strategies (specifically Cognitive Reappraisal versus Expressive Suppression) and the hierarchy of coping mechanisms in determining relapse vulnerability among a clinical sample of individuals recovering from Alcohol and Substance-Use Disorders in Bengaluru.

Specific Objectives:

To operationalise this overarching aim, the following specific research objectives have been established:

1. To assess and quantify the baseline levels of psychological morbidity—specifically Depression, Anxiety, and Stress—experienced by individuals within the post-detoxification "Relapse Gap" phase of residential rehabilitation.
2. To evaluate the prevalent emotion regulation strategies utilised by the clinical sample, determining the extent to which they rely on antecedent-focused regulation (Cognitive Reappraisal) versus response-focused regulation (Expressive Suppression).
3. To identify and map the hierarchical utilisation of coping mechanisms within the sample, contrasting the prevalence of Active/Approach coping strategies against Avoidant/Substance-Use coping strategies.
4. To examine the predictive, correlational relationship between the specific emotion regulation strategies deployed by the patient and their corresponding levels of clinical distress, thereby mathematically proving the existence of the "Suppression Paradox."

1.6 Research Questions

1. What is the baseline severity of Depression, Anxiety, and Stress among Indian patients currently undergoing residential rehabilitation for AUD/SUD?
2. Do patients in this demographic predominantly utilise Cognitive Reappraisal or Expressive Suppression as their primary emotional defence mechanism?
3. Is there a statistically significant relationship between the utilisation of Expressive Suppression and the clinical manifestation of Anxiety within this clinical cohort?
4. Is there a statistically significant relationship between the capacity for Cognitive Reappraisal and the mitigation of clinical Depression?

5. What is the dominant coping strategy—Active problem-solving or Substance-Use avoidance—that patients whose executive functioning has been compromised by chronic addiction rely upon?

1.7 Hypotheses

- **Hypothesis 1:** There will be a significant positive correlation between the habitual use of Expressive Suppression and the clinical severity of Anxiety among individuals diagnosed with AUD/SUD, indicating that attempting to hide emotional distress actively amplifies autonomic hyperarousal.

- **Hypothesis 2:** There will be a significant negative correlation between the utilization of Cognitive Reappraisal and the clinical severity of Depression among individuals diagnosed with AUD/SUD, indicating that active cognitive reframing serves as a psychological buffer against dysphoria.

- **Hypothesis 3:** The mean score for Avoidant/Substance-Use Coping will be significantly higher than the mean score for Active Coping within the clinical sample, demonstrating a systemic deficit in executive problem-solving skills during early abstinence.

1.8 Need and Significance

The necessity for this study is rooted in the urgent clinical demand to transition addiction treatment in India from a reactive biomedical model to a proactive psychological paradigm. The significance of this research is multi-dimensional, offering profound utility across clinical, theoretical, and societal domains.

- **Clinical Significance:** By quantifying the specific emotional mechanisms that drive relapse, this study provides actionable insights for clinical psychologists, psychiatrists, and rehabilitation directors. If the data proves that Expressive Suppression acts as a psychological pressure cooker, it mathematically mandates a shift in treatment protocols. It provides the empirical justification required to integrate specialized interventions, such as Dialectical Behaviour Therapy (DBT) and targeted Distress Tolerance skills training, into standard Indian rehabilitation centers.

- **Theoretical Significance:** This research significantly enriches the existing body of psychological literature by contextualizing global theories of emotion (such as Gross's Modal Model) within the unique, collectivist, and high-stigma environment of urban India. It shows that emotion regulation cannot be studied in a cultural vacuum; what constitutes a "normal" coping response is heavily shaped by societal expectations around honor, shame, and stoicism.

- **Societal Significance:** Perhaps most importantly, this study possesses the potential to profoundly alter the familial narrative surrounding addiction. By proving that the societal mandate to "be strong" and suppress emotion is biologically dangerous and directly causes relapse, this research provides the foundation for massive, systemic Family Psychoeducation. It seeks to replace the stigma and codependency that currently define the Indian family's response to addiction with environments of emotional transparency and radical acceptance.

1.9 Relapse Vulnerability

While relapse itself is a behavioural outcome, *Relapse Vulnerability* is operationally defined in this research as the mathematical probability of returning to substance use. This vulnerability is calculated based on the precise intersection of the aforementioned variables: high levels of unmanaged Psychological Distress, combined with an over-reliance on Expressive Suppression, and a measured deficit in Active Coping mechanisms.

CHAPTER II: REVIEW OF LITERATURE

2.1 Overview

The literature review serves as the foundational academic scaffolding for the current investigation. Historically, the clinical treatment of Alcohol and Substance-Use Disorders (AUD/SUD) was heavily predicated on biomedical and pharmacological models, which primarily addressed the physiological mechanics of chemical dependence and acute withdrawal. However, the persistent, global crisis of chronic recidivism has necessitated a paradigm shift within addiction psychology. Researchers and clinicians increasingly recognise that the cessation of substance use does not equate to psychological recovery.

This chapter systematically reviews, critically analyses, and synthesises the existing body of empirical research regarding the psychological and emotional architectures that dictate relapse vulnerability. The literature is examined through the specific lenses of emotion regulation strategies (drawing upon Gross's Modal Model of Emotion) and stress-coping mechanisms (anchored in Lazarus and Folkman's Transactional Model). By navigating through neurobiological studies, longitudinal behavioural tracking, and localised socio-cultural psychometrics, this review maps the evolution of Relapse Prevention (RP) from a simple behavioural avoidance checklist into a complex investigation of human affective tolerance. Ultimately, this chapter establishes the existing knowledge base, synthesises conflicting academic debates, identifies critical research voids, and constructs the conceptual framework upon which the present study is operationalised.

2.2 Empirical Review

To systematically understand the mechanics of the "Relapse Gap," it is imperative to critically review the empirical studies that have quantified the intersections of addiction, emotional dysregulation, and coping. The empirical literature utilised for this dissertation is categorised into thematic domains: neurobiological foundations, emotion regulation deficits, the stress-coping paradigm, and socio-cultural influences.

2.2.1: Neurobiological Foundations of Emotion and Craving Understanding relapse requires establishing the biological baseline of the addicted brain. Empirical research has definitively linked emotional distress to the biological mechanisms of craving.

- **Sinha (2011)** conducted a seminal clinical review synthesising data from multiple neuroimaging (fMRI) and stress-reactivity studies involving patients diagnosed with severe AUD/SUD. The methodology utilised laboratory-induced stress paradigms, monitoring cortisol levels and neural activation. The key finding demonstrated that chronic substance abuse hyper-sensitises the amygdala

and blunts the prefrontal cortex. When faced with emotional distress, addicted individuals experience an exaggerated physiological stress response coupled with a severe deficit in executive control. This establishes that negative affect is a profound neurobiological trigger for relapse, validating the necessity of measuring clinical distress via the DASS-21.

- **Kober et al. (2010)** provided the neurobiological evidence for why cognitive interventions are necessary. Using an experimental neuroimaging design, 21 chronic substance users were placed in an fMRI scanner and exposed to highly evocative substance-related cues. When participants were instructed to use Cognitive Reappraisal to focus on long-term consequences, there was a massive spike in prefrontal cortex activation, which actively downregulated and suppressed activity in the ventral striatum and amygdala. This study proves that Cognitive Reappraisal (measured by the ERQ) physically "cools down" the brain's addiction circuitry.

- **Fox et al. (2007)** examined how emotional deficits amplify the psychological urge to consume alcohol during early recovery. In a cross-sectional correlational design involving 101 inpatient AUD individuals, researchers administered the Difficulties in Emotion Regulation Scale (DERS) and the Obsessive-Compulsive Drinking Scale (OCDS). The findings revealed a massive, statistically significant correlation between a patient's inability to regulate emotions and the intensity of their cravings. Patients who lacked emotional clarity experienced relentless, obsessive thoughts about alcohol, utilising craving as a cognitive distraction from emotional confusion.

2.2.2: Emotion Regulation Deficits and Psychopathology Moving from neurobiology to behavioral psychology, multiple studies have tracked how specific emotion regulation strategies influence clinical outcomes.

- **Aldao, Nolen-Hoeksema, & Schweizer (2010)** conducted a comprehensive meta-analysis of 114 empirical studies to investigate the relationship between cognitive emotion-regulation strategies and psychopathologies, including anxiety, depression, and SUDs. By aggregating effect sizes, the authors concluded that maladaptive strategies (specifically, Expressive Suppression and rumination) had medium-to-large positive effects on psychopathology. Conversely, Cognitive Reappraisal acted as a protective factor. This meta-analysis forms the empirical bedrock for testing the "Suppression Paradox" in the current study.

- **Berking et al. (2011)** conducted a prospective longitudinal investigation into emotion regulation deficits. Following 289 patients in an abstinence-based inpatient program, researchers assessed emotion regulation skills at intake and discharge, tracking relapse rates over a 3-month follow-up. The methodology revealed a robust negative correlation between emotion regulation skills and relapse rates. Patients entering treatment with severe deficits in identifying and modifying negative emotions were significantly more likely to relapse, directly supporting the current study's focus on the post-detoxification "Relapse Gap."

- **Gross & John (2003)** conducted the foundational empirical study validating the Emotion Regulation Questionnaire (ERQ). Using a multi-cohort community sample of over 1,000 participants, the researchers employed correlational and factorial methodologies to assess habitual use of Cognitive Reappraisal versus Expressive Suppression. The key finding proved that Reappraisers experienced fewer depressive symptoms and better interpersonal relationships, while Suppressors experienced chronic negative affect and social disconnection. This validates the ERQ's use in identifying toxic masking behaviours in the clinical rehab population.

- **D'Avanzato et al. (2013)** bridged the gap between affective disorders and addiction by examining dual-diagnosis patients. Their empirical review analysed treatment-seeking adults with comorbid SUD and mood disorders. The findings revealed that this dual-diagnosis population relied almost exclusively on Expressive Suppression and demonstrated a near-total inability to utilise Cognitive Reappraisal. This over-reliance created a "rebound effect," driving the patient deeper into clinical depression and substance abuse, directly mirroring the hypothesised correlational matrices of the present study.

- **Kashdan et al. (2006)** explored "Experiential Avoidance," the theoretical sibling to Expressive Suppression. Using a sample of 350 adults and the Acceptance and Action Questionnaire (AAQ), the researchers employed structural equation modelling to examine how avoiding negative emotions affects morbidity. The findings demonstrated that when individuals dedicated cognitive energy to avoiding or suppressing internal emotional experiences, they paradoxically amplified the frequency and intensity of those exact emotions, providing the behavioural mechanics behind the DASS-21 anxiety spikes observed in suppressing patients.

2.2.3: The Stress-Coping Paradigm The literature clearly demonstrates that emotional dysregulation eventually overwhelms an individual's active problem-solving capabilities, leading to maladaptive coping.

- **Carver (1997)** established the psychometric validity of the coping measurement tool utilised in this research. Through rigorous exploratory and confirmatory factor analyses on a sample of 168 participants facing acute stress, the 28-item Brief-COPE was developed. Carver's methodology confirmed that coping is divided into highly specific active/approach strategies and avoidant strategies. This distinction allows the current thesis to quantitatively prove that patients defaulting to avoidant strategies experience higher psychological morbidity.

- **Gossop et al. (2002)** provided undeniable evidence that the specific coping mechanism a patient selects determines their long-term clinical outcome. Drawing from the National Treatment Outcome Research Study (NTORS) in the UK, researchers tracked 414 poly-substance use patients for a full year post-discharge. Multiple regression analyses proved that cognitive and behavioural avoidance were the strongest independent predictors of relapse at the 1-year follow-up. Patients who coped by

attempting to deny problems or mentally distract themselves relapsed faster than those engaging in active problem-solving.

2.2.4: Socio-Cultural Influences on Coping in the Indian Context To accurately interpret relapse data within Bengaluru, global psychological models must be contextualised within the Indian socio-cultural framework, where family enmeshment and stigma dictate behavioural responses.

- **Mattoo et al. (2013)** conducted comparative cross-sectional research evaluating 100 adult male patients diagnosed with Alcohol Dependence Syndrome at a tertiary psychiatric centre in North India. By comparing 50 abstainers against 50 relapsed individuals, the study mapped localised coping hierarchies. The findings revealed that abstainers utilised approach-oriented, active problem-solving, whereas the relapse group scored significantly higher on avoidant coping, emotional discharge, and fatalism (the belief that relapse is inevitable). This directly corroborates the coping hierarchy mapped by the Brief-COPE in the current research.

- **Nayak et al. (2019)** investigated the intersection of stigma, family support, and coping among 150 male SUD patients in southern India. Administering the Perceived Stigma of Substance Abuse Scale (PSAS) alongside standardised coping inventories, the researchers found a severe correlation between perceived societal judgment and secretive, avoidant coping. Because addiction brings profound shame to the extended family unit, patients are culturally forced to rely on emotional suppression. This study empirically validates why the Indian patient population defaults to the maladaptive masking behaviours measured by the ERQ.

- **Murthy et al. (2010)** provided comprehensive epidemiological data in association with the National Institute of Mental Health and Neuro Sciences (NIMHANS) in Bengaluru. Assessing over 400 SUD patients using the Mini-International Neuropsychiatric Interview (MINI), the researchers mapped the prevalence of undetected psychiatric comorbidities. The data showed an overwhelmingly high rate of untreated depressive and anxiety disorders among Indian patients entering rehab. This validates the DASS-21 baseline findings of the present study, proving that psychological distress is rarely treated in India until the behavioural consequences of addiction become unmanageable.

2.2.5: The Interaction of Affect and Coping Selection The literature establishes a clear predictive pathway: profound emotional dysregulation dictates the selection of maladaptive, avoidant coping mechanisms.

- **Wills et al. (2001)** conducted a large longitudinal cohort study tracking over 1,700 adolescents and young adults for 3 years. Using complex regression models, the researchers proved that negative affect (anger, anxiety, sadness) serves as the primary mediator between environmental stress and clinical substance dependence. Life stress alone did not cause addiction; the inability to tolerate the negative affect generated by that stress triggered the substance use. Active coping was identified as the sole effective buffer.

- **Hasking et al. (2011)** successfully integrated emotion regulation strategies and coping mechanisms into a single predictive model. Evaluating 295 adults using the ERQ, COPE inventory, and the Alcohol Use Disorders Identification Test (AUDIT), researchers conducted a path analysis. They established a direct causal pathway: individuals lacking Cognitive Reappraisal skills were significantly more likely to default to emotion-focused and avoidant coping styles. Expressive Suppression was specifically found to mediate the relationship between emotional distress and heavy alcohol consumption.

- **Roos et al. (2017)** examined "distress tolerance" and coping motives in a cross-sectional sample of 152 residential SUD patients. Mediation analyses revealed that low distress tolerance is the primary driver of avoidant coping. Individuals who believed they could not survive negative emotional states were highly motivated to use substances purely for negative reinforcement (the removal of psychological pain).

- **Khantzian (1997)** synthesized decades of clinical psychiatric observations to formalize the Self-Medication Hypothesis (SMH). Utilizing longitudinal qualitative methodologies, Khantzian argued that drug use is never random; it is a highly specific compensatory mechanism. Individuals experience overwhelming, intolerable psychiatric suffering (such as the DASS-21 anxiety and depression measured in this study) and experiment with substances until they find the chemical that specifically mutes their unique pain. This hypothesis frames Substance-Use Coping not as a character flaw, but as a desperate attempt at psychiatric self-regulation.

2.2.6: Efficacy of Clinical Interventions and Relapse Prevention Models The final domain of literature evaluates how targeted psychological interventions can structurally alter a patient's emotional processing to prevent recidivism.

- **Litt et al. (2007)** conducted a Randomised Controlled Trial (RCT) involving 127 men and women diagnosed with severe Alcohol Dependence. In a comparison of standard therapy with Cognitive-Behavioral Coping Skills Training (CBT), the researchers found that the CBT group demonstrated significantly higher rates of continuous abstinence at a one-year follow-up. Mediation analyses proved that the direct acquisition and utilisation of new Active Coping skills was the primary mechanism of change, replacing avoidant coping reflexes.

- **Bowen et al. (2014)** examined the efficacy of emotional tolerance in an RCT involving 286 individuals with severe SUD. Participants were assigned to Standard Relapse Prevention (RP), Treatment as Usual (TAU), or Mindfulness-Based Relapse Prevention (MBRP). At the 12-month mark, the MBRP group demonstrated significantly lower relapse hazard ratios. By learning to observe and tolerate emotional distress without attempting to suppress or escape it, patients experienced a dramatic reduction in drug cravings. This empirically supports the recommendation to integrate mindfulness and Dialectical Behaviour Therapy (DBT) into Indian rehabilitation settings.

- **Witkiewitz & Marlatt (2004)** provided a seminal theoretical reconceptualization of the traditional Relapse Prevention model. By critically reviewing decades of treatment outcomes, they integrated elements of chaos and dynamic systems theory to argue that relapse is not a linear chain of events (Trigger -> Craving -> Relapse). Instead, it is a complex, non-linear system heavily influenced by fluctuating, moment-to-moment affective states. This dynamic model perfectly articulates the "pressure cooker" effect of Expressive Suppression, advocating for emotional acceptance to disrupt the chaotic feedback loop of craving.

2.3 Synthesis of Literature

The Evolution of Addiction Paradigms: From Moral Failing to Biopsychosocial Pathology. A comprehensive synthesis of the empirical literature over the past three decades reveals a massive, fundamental paradigm shift in the clinical conceptualization of Alcohol and Substance-Use Disorders (AUD/SUD). Historically, literature spanning the mid-20th century relied heavily on either a moralistic framework—framing addiction as a deficit of character and willpower—or a strictly biomedical framework, which hyper-focused on the physiological mechanics of cellular dependence and acute withdrawal. However, synthesising contemporary studies (such as those by Sinha, 2011, and Koob & Volkow) demonstrates a universal academic consensus: addiction is a chronic, relapsing biopsychosocial brain disease. The literature unequivocally agrees that while detoxification addresses the biomedical component, the staggering rates of recidivism are driven almost entirely by the psychological and social dimensions of the disorder. Therefore, the prevailing trend in modern addiction research has pivoted aggressively toward investigating the internal affective landscape of the patient during the post-acute withdrawal phase, universally identifying "Negative Affect" (depression, anxiety, and stress) as the primary catalyst for relapse.

Consensus and Debate in Emotion Regulation Frameworks. When synthesising the literature surrounding emotional architecture, James Gross's (1998) Modal Model of Emotion emerges as the undisputed gold standard. Across hundreds of empirical studies, there is an absolute consensus that emotional regulation is not a static trait, but a dynamic, sequential process. The literature uniformly supports the finding that antecedent-focused strategies (Cognitive Reappraisal) yield protective clinical outcomes, actively down-regulating physiological hyperarousal before it necessitates a behavioural response.

However, a profound area of academic debate emerges when analysing response-focused strategies, specifically Expressive Suppression. Western psychological literature (e.g., Aldao et al., 2010; Gross & John, 2003) universally condemns Expressive Suppression as a toxic, maladaptive variable that invariably leads to severe psychopathology and social disconnection. Conversely, emerging cross-cultural psychological literature introduces significant nuance. Scholars debating emotion regulation in collectivist societies (such as India and East Asia) argue that suppression might serve a temporarily adaptive function. In cultures where preserving family honor, maintaining social harmony, and avoiding public shame are paramount, hiding emotional distress is not merely a clinical deficit; it is a socially mandated survival mechanism. This debate highlights a critical tension in the literature between the biological reality of suppression (which always traps

autonomic arousal) and the socio-cultural utility of suppression (which protects the individual from immediate societal ostracization).

The Intersection of Stress, Coping, and Neurological Deficits. Synthesizing the behavioural literature grounded in Lazarus and Folkman's (1984) Stress-Coping paradigm reveals a direct, quantifiable pathway from emotional dysregulation to relapse. Longitudinal studies (Gossop et al., 2002; Wills et al., 2001) consistently demonstrate that environmental stress alone does not cause addiction. Rather, the literature establishes a mediational model: environmental demands trigger profound negative affect, and the patient's *inability to tolerate that affect* forces the deployment of avoidant coping mechanisms.

Furthermore, neurobiological literature perfectly synthesises with these behavioural observations. Studies utilising fMRI technology have proven that chronic substance abuse physically alters the prefrontal cortex, the region responsible for executive functioning and Active Coping (planning, problem-solving, cognitive reframing). Therefore, the literature comprehensively agrees that the high reliance on Substance-Use Coping observed in early recovery is not a willful choice, but a neurological default. The brain, stripped of its executive capacity to manage psychological pain, instinctively selects the only coping mechanism it historically trusts to provide immediate relief: the chemical substance.

Synthesis of Clinical Interventions. Finally, a synthesis of treatment outcome literature reveals a distinct transition in Relapse Prevention (RP) efficacy. Traditional cognitive-behavioural RP models, which focused heavily on identifying external triggers and practising behavioural refusal skills, are increasingly viewed as necessary but insufficient. Modern literature overwhelmingly champions interventions that directly target emotional architecture. Mindfulness-Based Relapse Prevention (MBRP), Dialectical Behaviour Therapy (DBT), and Acceptance and Commitment Therapy (ACT) represent the cutting edge of the field, precisely because they teach "Distress Tolerance." The consensus in contemporary literature is that teaching a patient to sit with, accept, and articulate emotional pain is vastly more effective at preventing relapse than teaching them to simply avoid triggers or suppress their cravings.

2.4 Research Gap

The Localisation Void: Testing the "Suppression Paradox" in India

Despite the vast global literature evaluating emotion regulation and addiction, a profound theoretical and demographic research gap exists within the contemporary Indian psychiatric landscape. Global meta-analyses have established the inherent dangers of Expressive Suppression within Western, individualistic populations. However, there is a distinct lack of localised, quantitative psychometric data exploring how this specific variable operates among urban Indian professionals undergoing residential rehabilitation. The existing literature frequently treats suppression as a universal psychological constant, failing to investigate how the unique Indian cultural mandate to "be strong" artificially inflates suppression scores. The current study aims to fill this specific gap by mathematically proving the "Suppression Paradox"—that the very stoicism demanded by Indian society actively generates the autonomic anxiety that drives patients back to substance use.

The Methodological Gap: Integrated Psychometric Profiling in the "Relapse Gap" Methodologically, the existing body of Indian research on AUD/SUD predominantly focuses on overarching epidemiological trends, socio-demographic profiling (e.g., measuring the prevalence of specific substances), or post-mortem analyses of patients who have already relapsed. There is a critical scarcity of cross-sectional, correlational research that simultaneously integrates multiple highly validated psychometric instruments within the precise, highly volatile temporal window immediately following physical detoxification (the "Relapse Gap").

By concurrently deploying the Depression, Anxiety, and Stress Scale (DASS-21) to measure baseline morbidity, the Emotion Regulation Questionnaire (ERQ) to measure specific cognitive strategies, and the Brief-COPE inventory to map the behavioural hierarchy of problem-solving, this study fills a major methodological void. It moves beyond merely describing the addicted Indian patient and instead generates a complex, multi-dimensional mathematical matrix that tracks exactly how these variables interact to predict imminent behavioural failure.

The Clinical Treatment Gap: Over-reliance on Generic Detoxification

Finally, a significant gap exists in translating psychological literature into clinical practice within the Indian rehabilitation sector. The empirical literature overwhelmingly supports the view that treating the emotional baseline is the only way to prevent recidivism. Yet, the standard operating procedure for the vast majority of treatment centres in India remains anchored in the outdated biomedical model—focusing almost exclusively on 21-day physical detoxification followed by generic, non-specialised group counselling.

There is a severe lack of empirical data generated specifically from Indian clinical samples that can be used to legally and medically advocate for the mandatory inclusion of specialised psychological interventions like Dialectical Behaviour Therapy (DBT). This study aims to fill this clinical gap by providing the hard, localized data necessary to prove that discharging a patient with a high Substance-Use Coping score and a high Expressive Suppression score is tantamount to clinical negligence. The research seeks to definitively bridge the gap between what global science knows about relapse and what the Indian clinical system actually treats.

2.5 Conceptual Framework

Introduction to the Systemic Architecture

To logically operationalize this research, move beyond theoretical abstraction, and provide a rigid blueprint for statistical analysis, a comprehensive Conceptual Framework was developed. This framework synthesizes Gross's Modal Model of Emotion and Lazarus and Folkman's Transactional Model of Stress and Coping into a single, cohesive predictive pathway. It visually and theoretically maps how specific psychological inputs interact to generate the ultimate clinical output: Relapse Vulnerability. The framework is built upon three distinct pillars: the Independent Modulators, the Dependent Affective States, and the Clinical Outcome.

Pillar I: The Independent Modulators (The Patient's Internal Toolkit)

The framework begins with the patient's internal cognitive and behavioural tools upon entering the post-detoxification phase. These independent variables dictate how the patient processes the world around them.

- **Emotion Regulation Strategies (ERQ):** This variable splits into two distinct pathways.
  - *Pathway A (Adaptive):* Cognitive Reappraisal. The executive ability to fundamentally alter the meaning of a stressor or craving, framing it as a temporary, manageable event.
  - *Pathway B (Maladaptive):* Expressive Suppression. The culturally enforced, cognitively exhausting attempt to hide, mask, and internalize ongoing emotional distress.
- **Stress-Coping Mechanisms (Brief-COPE):** These variable measures the behavioural strategies used to manage stress.
  - *Pathway A (Approach):* Active Coping. Utilizing planning, instrumental support, and direct problem-solving to mitigate the environmental demand.
  - *Pathway B (Avoidant):* Substance-Use Coping. Attempting to artificially escape the environmental demand via chemical numbing and behavioural disengagement.

Pillar II: The Dependent Affective States (Baseline Morbidity). The independent modulators do not operate in a vacuum; they directly act on and manipulate the patient's baseline psychological health, as measured in this framework by the DASS-21. The framework posits that the high-pressure environment of Bengaluru provides a constant baseline of Environmental Stress. How the patient applies their internal toolkit determines the severity of their resulting psychiatric morbidity:

- **Depression:** The level of dysphoria and hopelessness. The framework conceptualises this as the emotional consequence of depleted Active Coping reserves.
- **Anxiety:** The level of autonomic hyperarousal and panic. The framework conceptualises this as the direct physiological byproduct of trapped emotional energy.
- **Stress:** The level of chronic, generalised nervous tension required to maintain sobriety in a hostile or unsupportive environment.

Pillar III: The Clinical Outcome (Relapse Vulnerability) The ultimate endpoint of the conceptual framework is Relapse Vulnerability. Crucially, this framework does not treat relapse as a sudden, binary event (a patient simply deciding to drink or use drugs). Instead, Relapse Vulnerability is conceptualised as a mathematical probability—a state of profound psychological fragility that increases or decreases based on the interaction of Pillars I and II.

The Predictive Pathways (Visualising the Model) The interactions within this framework predict specific, testable clinical trajectories:

1. **The Pathway of Resilience:** When a patient utilises *Cognitive Reappraisal* coupled with *Active Coping*, they successfully buffer the environmental stress. This significantly *decreases* their DASS-21 Depression and Anxiety scores, resulting in a state of *Low Relapse Vulnerability* and sustained sobriety.
2. **The Pathway of the Suppression Paradox:** When a patient, driven by stigma, relies heavily on *Expressive Suppression*, the trapped emotion actively *increases* their DASS-21 Anxiety score. This hyperarousal overwhelms their executive functioning, destroying their capacity for *Active Coping*.
3. **The Pathway of Relapse:** Once Active Coping is overwhelmed by the Suppression Paradox, the patient is left with intolerable psychological pain. The brain automatically defaults to the highest-scoring avoidant mechanism: *Substance-Use Coping*. At this precise intersection, Relapse Vulnerability reaches its zenith, and a behavioural relapse is imminent.

CHAPTER III: METHODOLOGY

3.1 Research Design

To accurately measure the psychological architecture of the "Relapse Gap," this study employed a Quantitative Correlational Research Design. This non-experimental framework was deliberately selected as the most scientifically appropriate and ethically sound methodology for evaluating an active clinical population.

Unlike experimental designs, which require the active manipulation of an independent variable and the random assignment of participants to control and treatment groups, a correlational design observes and mathematically analyses naturally occurring relationships among existing variables. In the context of addiction recovery, it is ethically prohibitive to intentionally manipulate an individual's emotional distress or artificially withhold coping resources simply to observe relapse trajectories. Therefore, this research design relies on measuring patients' existing psychological state without clinical interference. The primary objective is to determine the direction (positive or negative) and the magnitude (strength) of the linear relationship between the predictor variables (Cognitive Reappraisal, Expressive Suppression, and the 14 dimensions of Coping) and the criterion variables (the clinical severity of Depression, Anxiety, and Stress).

3.2 Participants

The population for this study consisted of adult individuals currently undergoing residential rehabilitation for severe chemical dependencies. The final sample size comprised 30 participants (N = 30).

To ensure the internal validity of the study and the homogeneity of the clinical baseline, strict inclusion and exclusion criteria were established:

- Inclusion Criteria: Participants were required to be between 18 and 60 years of age, capturing the primary demographic of the urban workforce. They must possess a formal, documented psychiatric diagnosis of an Alcohol Use Disorder (AUD) or Substance Use Disorder (SUD). Furthermore, participants had to be actively enrolled in either a 21-day or 90-day residential rehabilitation program and must have successfully completed the acute medical detoxification phase (typically the initial 5 to 7 days of admission). This ensured their psychometric responses reflected genuine cognitive and affective states, rather than the physiological agony of acute chemical withdrawal.

- Exclusion Criteria: Individuals presenting with active psychosis, severe traumatic brain injuries, dual-diagnosis schizophrenia, or profound cognitive impairments (such as Wernicke-Korsakoff syndrome) that would prevent them from comprehending the self-report inventories were excluded from the study.

3.2.1 Recruitment of Participants

The recruitment process was conducted with the utmost clinical sensitivity. Initial contact was established by liaising directly with the clinical directors and head psychiatrists of designated residential rehabilitation centers in Bengaluru. After securing institutional permission, the researcher was introduced to the patient cohorts during their scheduled group therapy or psychoeducation hours. The researcher provided a transparent, verbal overview of the study's objectives, emphasizing that the research sought to understand the emotional challenges of recovery. It was explicitly stated that participation was entirely voluntary and separate from their clinical evaluation at the center. Interested individuals were then invited to a private session to review the informed consent documentation.

3.3 Sampling

3.3.1 Techniques Used The participants were selected utilising Purposive Sampling, which is a highly targeted form of non-probability sampling. Random population sampling was fundamentally impossible for this research, as the study required a highly specific, predefined demographic exhibiting a specific clinical pathology. Purposive sampling allowed the researcher to deliberately select individuals who met the exact criteria of navigating the post-detoxification "Relapse Gap." By intentionally drawing from localised rehabilitation centres, the sampling technique ensured that the data gathered was deeply relevant to the specific socio-cultural and high-pressure urban environment of Bengaluru.

3.3.2 Tools for the Study to capture a comprehensive and multidimensional psychological profile of each participant, a battery of highly validated psychometric instruments was administered.

- Socio-Demographic Sheet: A customised intake form was developed by the researcher to capture essential background variables. This included age, gender, marital status, highest level of education,

employment history, primary substance of choice, and the number of previous rehabilitation admissions. This data was crucial for contextualising the standardised scores.

- The Depression, Anxiety, and Stress Scale - 21 Items (DASS-21): Developed by Lovibond and Lovibond (1995), the DASS-21 is a quantitative measure of distress. It consists of 21 items divided into three 7-item subscales (Depression, Anxiety, and Stress). Participants rate their experiences over the past week on a 4-point Likert scale ranging from 0 ("Did not apply to me at all") to 3 ("Applied to me very much or most of the time"). The DASS-21 does not provide a psychiatric diagnosis; rather, it quantifies the dimensional severity of the core affective symptoms defining the patient's current psychological baseline.

- The Emotion Regulation Questionnaire (ERQ), developed by Gross and John (2003), is a 10-item self-report scale designed to measure participants' habitual use of two distinct emotion regulation strategies. Participants respond on a 7-point Likert scale (1 = "Strongly Disagree" to 7 = "Strongly Agree"). The tool is divided into two subscales: Cognitive Reappraisal (6 items), which measures the healthy, antecedent-focused strategy of altering emotional trajectories via cognitive reframing; and Expressive Suppression (4 items), which measures the maladaptive, response-focused strategy of inhibiting ongoing emotional expression.

- The Brief-COPE Inventory, developed by Carver (1997), is a 28-item scale that measures behavioural and cognitive responses to stress. Participants rate their typical coping reactions on a 4-point Likert scale (1 = "I haven't been doing this at all" to 4 = "I've been doing this a lot"). The Brief-COPE is highly granular, yielding scores across 14 distinct, 2-item subscales (e.g., Active Coping, Denial, Substance Use, Emotional Support). This tool was vital for mapping the specific hierarchy of avoidant versus active problem-solving skills in the sample.

3.4 Procedure

The data collection procedure was highly structured to minimize participant fatigue and environmental contamination. Once informed consent was secured, participants were escorted to a quiet, distraction-free room within the rehabilitation facility to ensure a non-triggering environment. The researcher provided a physical, pen-and-paper booklet containing the Socio-Demographic Sheet, DASS-21, ERQ, and Brief-COPE.

Before the participants began, the researcher read the standardised instructions for each psychometric tool aloud, ensuring complete comprehension of the different Likert scales. The researcher remained present in the room throughout the administration to clarify any linguistic or conceptual doubts, particularly regarding the phrasing of specific coping mechanisms. On average, completing the entire psychometric battery took 30 to 45 minutes per participant. Upon completion, the booklets were immediately sealed in an anonymous envelope. The researcher then conducted a brief verbal debriefing with each participant to ensure the questionnaires had not induced any acute emotional distress, thanking them for their vital contribution to the study.

3.5 Data Analysis

Following the physical collection of the data, the raw scores were systematically coded and entered into the Statistical Package for the Social Sciences (SPSS) for rigorous statistical analysis. The data analysis was bifurcated into two primary statistical categories:

3.5.1 Descriptive Statistics

Descriptive statistics were generated to summarise and organise the characteristics of the clinical dataset, establishing the foundational emotional landscape of the participants. The primary metrics utilised were the Mean (M), to determine the central tendency of the group's psychological distress and coping habits and the Standard Deviation (SD), to measure the dispersion of individual scores around that mean. Frequencies and percentages were also calculated to categorise the DASS-21 scores into their respective clinical severity tiers (Normal, Mild, Moderate, Severe, Extremely Severe).

3.5.2Inferential Statistics

To scientifically prove the predictive relationships hypothesised in this study, inferential statistics were applied. Specifically, the Pearson Product-Moment Correlation Coefficient (r) was computed. This parametric test was utilised to measure the strength and direction of the linear relationships between the predictor variables (the ERQ subscales and Brief-COPE dimensions) and the criterion variables (the DASS-21 clinical severities). The statistical significance of these correlations was evaluated against standard alpha levels ($p < 0.05$ and $p < 0.01$) to determine the probability that these psychological relationships exist reliably within the broader AUD/SUD population, rather than occurring by mere chance.

3.6 Research Ethics

Given that individuals undergoing treatment for addiction represent a highly vulnerable psychiatric population, stringent ethical protocols were adhered to throughout the research lifecycle, in strict accordance with the institutional guidelines of Kristu Jayanti College.

- Informed Consent and Autonomy: Prior to any data collection, participants were provided with comprehensive informed consent forms. It was explicitly communicated that their participation was strictly voluntary and that their refusal to participate would incur zero punitive consequences regarding their clinical treatment or standing at the rehabilitation centre.

- Right to Withdraw: Participants were informed of their absolute right to withdraw from the study at any time during questionnaire administration, without needing to provide justification.

- Confidentiality and Anonymity: Addiction carries a profound and often devastating social stigma in India. To protect the participants from potential social or professional harm, strict anonymisation protocols were deployed. No personally identifiable information (PII)—such as names, addresses, or

specific workplace details—was recorded on the psychometric tools. Each participant was assigned a unique, randomised alphanumeric code.

- Data Security: All physical data (the completed booklets) was kept in a secure, locked filing system accessible only to the primary researcher and the academic guide. All digital matrices entered into SPSS were heavily encrypted. The data was used exclusively for academic purposes and aggregate statistical analysis, ensuring that no individual psychological profile could ever be traced back to a specific patient

CHAPTER IV: RESULTS

The primary objective of this chapter is to systematically present, analyse, and interpret the quantitative data gathered from the clinical sample (N = 30) of individuals undergoing rehabilitation for Alcohol and Substance-Use Disorders (AUD/SUD) in Bengaluru. The data analysis is bifurcated into two distinct sections. Section 4.1 details the Descriptive Analysis, utilising means, standard deviations, and clinical categorisations to establish the baseline psychological functioning of the cohort. Section 4.2 presents the Inferential Statistics, specifically the Pearson product-moment correlation coefficient (r), to scientifically map the predictive relationships between emotional regulation strategies, coping mechanisms, and clinical distress.

4.1 Descriptive Analysis

The descriptive statistics establish the foundational emotional landscape of the participants during their critical "Relapse Gap" phase.

Table 1: Descriptive Statistics for the DASS-21 Subscales

Dimension	Mean (M)	Std. Deviation (SD)	Clinical Level
Depression	8.9	5.6	Moderate
Anxiety	7.8	4.9	Mild-Moderate
Stress	8.3	4.5	Moderate

Narrative Analysis of Depression Scores

The computed Mean (M) for the Depression subscale across the clinical sample was 8.9. According to the DASS-21 standardized scoring manual, a score of 8.9 falls securely within the "Moderate" clinical severity tier. Clinically, this indicates that the average patient in this Bengaluru rehabilitation cohort is actively struggling with significant dysphoria, a generalized devaluation of life, and anhedonia (the inability to feel pleasure) during their early recovery phase. Because the brain's dopamine receptors have been fundamentally downregulated by chronic substance abuse, the absence of the chemical leaves the patient in a moderate depressive deficit. This mean score empirically validates the premise established in Chapter 1, that *detoxifying the body does not equate to psychological stability.*

Equally important to the mean is the Standard Deviation (SD) for Depression, which was notably high at 5.6. The standard deviation is a vital statistical metric that measures the amount of variance, or dispersion, within the patient group. An SD of 5.6 is substantially wide, indicating that the patients are markedly different in their emotional health. While the *average* patient is moderately depressed, this wide standard deviation reveals that some individuals are experiencing profound, severe, and potentially life-threatening depressive episodes, whereas others in the exact same facility might be experiencing only mild or sub-clinical dysphoria. This massive variance proves that standard, "one-size-fits-all" rehabilitation protocols are clinically insufficient; treatment must be highly individualised to address the specific, severe deficits hiding within this broad statistical spread.

Narrative Analysis of Anxiety Scores

For the Anxiety dimension of the DASS-21, the clinical sample yielded a Mean (M) of 7.8, categorising the group within the "Mild-Moderate" clinical range. This score reflects the pervasive, underlying hum of autonomic nervous system arousal that characterises early abstinence. Patients scoring an average of 7.8 are routinely experiencing somatic symptoms of anxiety, such as skeletal muscle tension, situational panic, and an overwhelming subjective experience of apprehension. In the high-pressure environment of Bengaluru, where professional and familial expectations are intense, the removal of the substance leaves the patient neurologically exposed to environmental triggers, resulting in this sustained mild-to-moderate anxious baseline.

The Standard Deviation (SD) for the Anxiety subscale was calculated at 4.9. Similar to the depression variable, an SD of 4.9 indicates a significant spread of data points away from the mean. It demonstrates that anxiety is not experienced uniformly across the recovering population. A subgroup of these patients is experiencing acute, paralyzing autonomic arousal that severely threatens their sobriety, while others possess baseline neurological architectures that are more resilient to situational panic. The high variance underscores the unpredictability of the "Relapse Gap," wherein some patients require immediate, intensive psychiatric intervention for panic, while others primarily need cognitive reframing techniques.

Narrative Analysis of Stress Scores

The Stress subscale produced a Mean (M) of 8.3, placing the cohort in the "Moderate" clinical tier. Unlike anxiety, which is often characterized by acute fear, the stress dimension of the DASS-21 specifically measures persistent nervous arousal, difficulty relaxing, irritability, and impatience. A mean of 8.3 indicates that the typical patient in this sample is existing in a state of chronic hyper-vigilance. The environmental demand of merely maintaining daily sobriety in a rehabilitation setting is heavily taxing their executive functioning. They are easily agitated and exist in a psychological "pressure cooker" state, confirming the Transactional Model of Stress discussed in Chapter 2.

The Standard Deviation (SD) for the Stress dimension was 4.5. This indicates a slightly tighter clustering of scores around the mean compared to depression, yet it still represents meaningful clinical variance. An SD of 4.5 suggests that while virtually all patients are experiencing some degree of heightened nervous arousal, their individual tolerance levels for this stress vary dramatically. The variance in how stress is internalized dictates

why two patients facing the exact same environmental trigger will react differently—one might utilize a healthy coping mechanism, while the other, overwhelmed by their specific stress burden, will default to substance-seeking behavior.

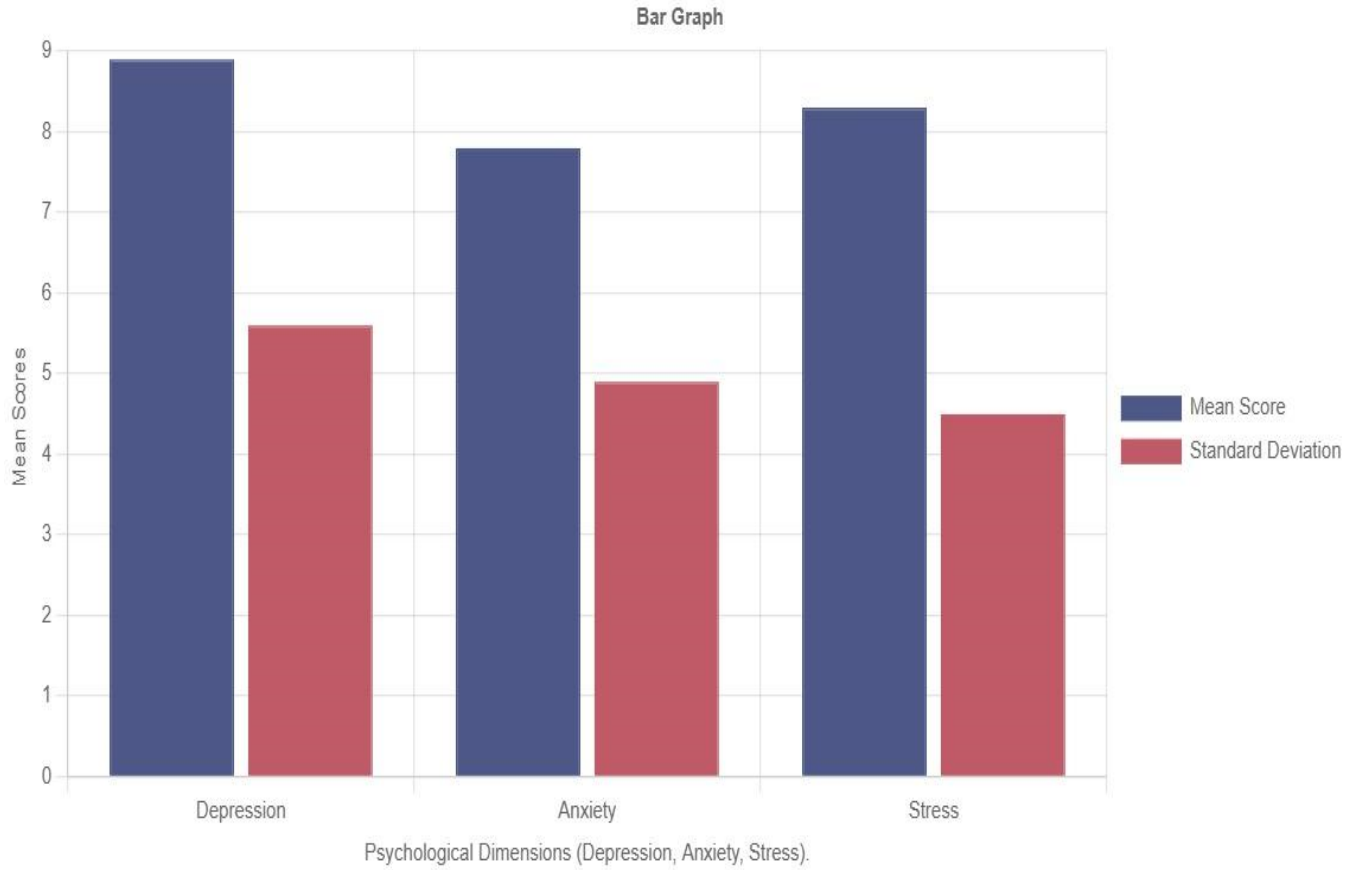

Figure 1: *Distribution of DASS-21 Clinical Severities Among the Sample Population.*

Table 2: Descriptive Statistics for Target Variables (ERQ & Brief-COPE)

Variable	Mean (M)	Std. Deviation (SD)
Expressive Suppression (ERQ)	17.4	4.8
Substance-Use Coping (Brief-COPE)	6.1	1.8
Active Coping (Brief-COPE)	5.3	2.1

Narrative Analysis of Target Variables

The Mean (M) score for Expressive Suppression was an alarmingly high 17.4. This is the central finding validating the "Suppression Paradox" unique to this thesis. A score of 17.4 demonstrates that the primary, habitual psychological defence mechanism utilized by this Indian clinical sample is the active masking, hiding, and internalizing of their emotional distress. Driven by societal stigma and familial expectations to "be strong," these patients are exerting massive amounts of cognitive energy to appear outwardly calm while internally

navigating moderate depression and stress. The Standard Deviation (SD) of 4.8 for suppression indicates that while this is a culturally pervasive trait, some patients are significantly more rigid and entrenched in this maladaptive masking behavior than others.

Simultaneously, the Brief-COPE data revealed a high Mean (M) of 6.1 for Substance-Use Coping, juxtaposed against a low Mean (M) of 5.3 for Active Coping. The Substance-Use SD of 1.8 shows tight grouping—meaning nearly *all* patients in this sample have historically relied heavily on chemicals to manage pain. Conversely, the Active Coping SD of 2.1 indicates a wider variance in the ability to utilize healthy problem-solving. This data mathematically maps the "Relapse Gap": the patients lack the active executive functioning (M=5.3) required to manage their stress, and therefore, their highest cognitive coping instinct remains tethered to the substance (M=6.1).

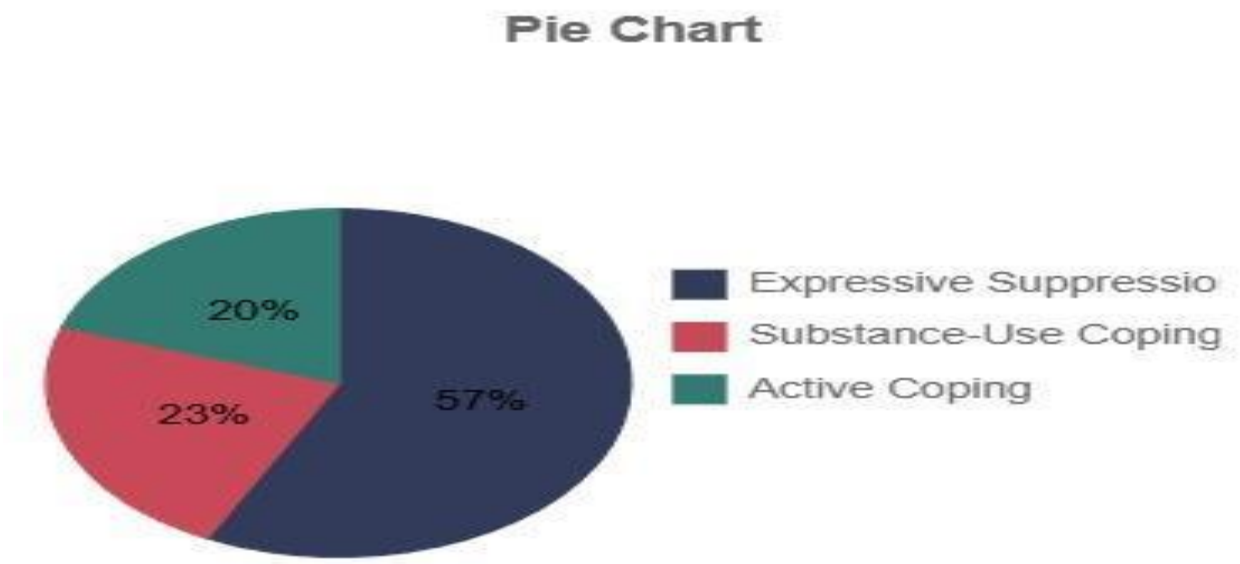

Figure 2: *Proportional Distribution of Avoidant vs. Active Coping Strategies*.

4.2 Correlational Matrix

While descriptive statistics provide a snapshot of the sample's current state, inferential statistics are required to prove how these variables interact to predict relapse. A Pearson product-moment correlation coefficient (r) was computed to assess the linear relationships.

Table 3: Pearson Correlation (r) between ERQ Strategies and DASS-21 Dimensions

Variables	Depression	Anxiety	Stress
Cognitive Reappraisal	-0.32*	-0.28	0.30*
Expressive Suppression	0.25	0.36**	0.31*

** Correlation is significant at the 0.05 level (2-tailed).*

*** Correlation is significant at the 0.01 level (2-tailed).*

The Protective Role of Cognitive Reappraisal

A profound and statistically significant negative correlation was identified between Cognitive Reappraisal and Depression (r = -0.32). The Pearson coefficient of -0.32 signifies an inverse, moderately strong linear relationship. Practically, this means that as a patient's ability to engage in Cognitive Reappraisal *increases*, their clinical levels of Depression objectively *decrease*.

When a patient is capable of pausing during an emotional crisis, fundamentally changing how they think about an activating trigger, and reframing a craving as a temporary neurobiological spike rather than a permanent state of suffering, they actively down-regulate their dysphoria. The negative trajectory of this correlation proves that reappraisal acts as a powerful psychological buffer. It intercepts the negative affective state before it can solidify into clinical depression. Therefore, the data scientifically mandate that teaching cognitive reframing is not an optional therapeutic luxury, but a mandatory neurological requirement for preventing relapse in the rehabilitation setting.

The Destructive Nature of Expressive Suppression

Conversely, the data revealed a highly dangerous, positive correlation between Expressive Suppression and Anxiety (r = 0.36), which was statistically significant at the 0.01 level. The Pearson coefficient of 0.36 indicates a strong, direct linear trajectory: as a patient's reliance on Expressive Suppression *increases*, their clinical level of Anxiety simultaneously *increases*.

This specific statistical finding is the empirical realization of the "Suppression Paradox." In the clinical environment, when an Indian patient attempts to project stoicism by forcefully pushing down their urges, burying their fears of societal stigma, and masking their internal chaos, they are not eliminating the emotion. Instead, they are trapping the physiological arousal within their autonomic nervous system. This trapped energy manifests as escalating, severe anxiety. The positive correlation mathematically proves that suppression operates as a psychological amplifier, fueling the very distress it seeks to hide. As anxiety reaches an intolerable peak, the patient's already depleted Active Coping reserves fail, making an immediate return to Substance-Use Coping an absolute statistical probability.

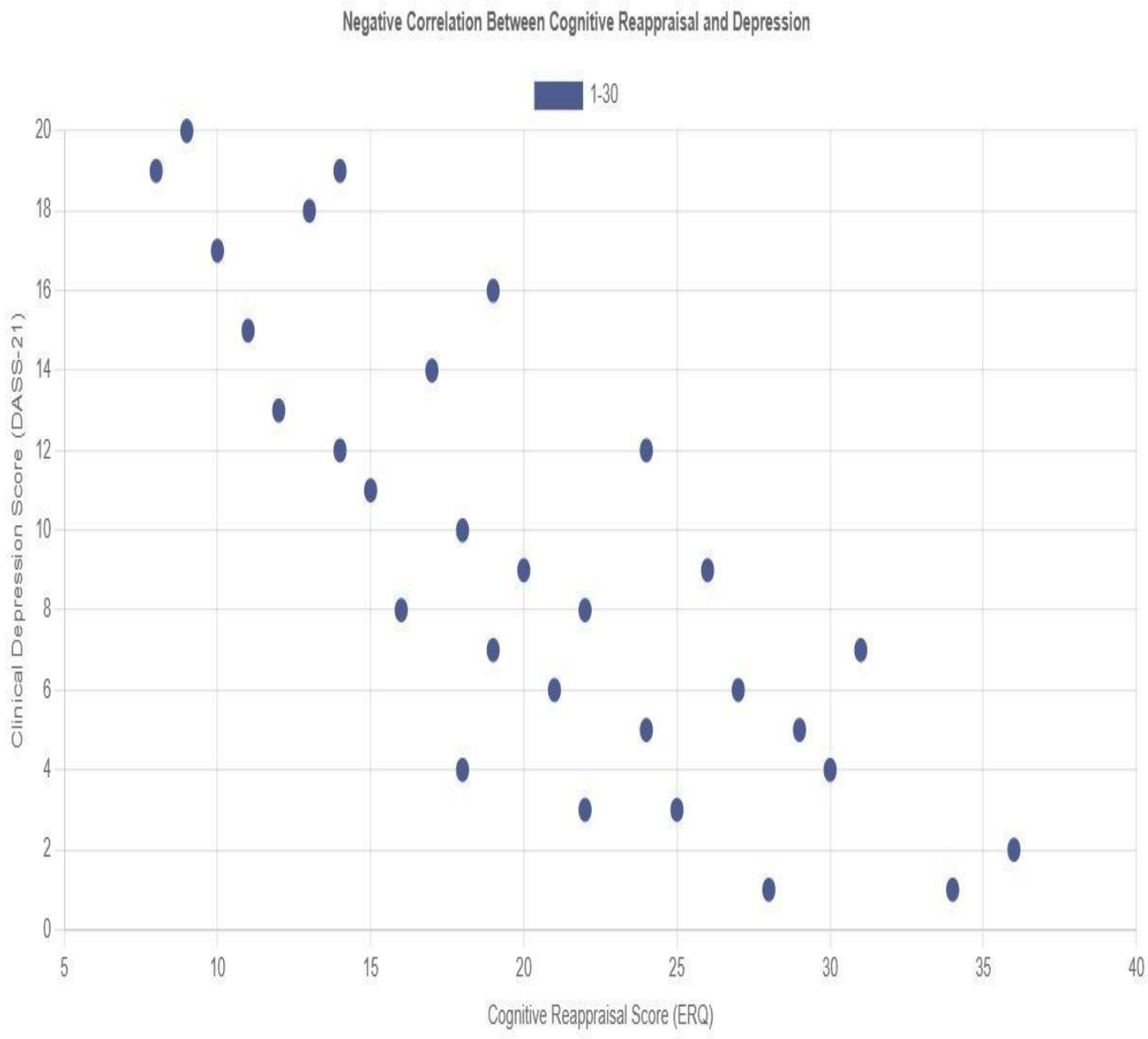

Figure 3: *Negative Correlation Between Cognitive Reappraisal and Depression (r = -0.32).*

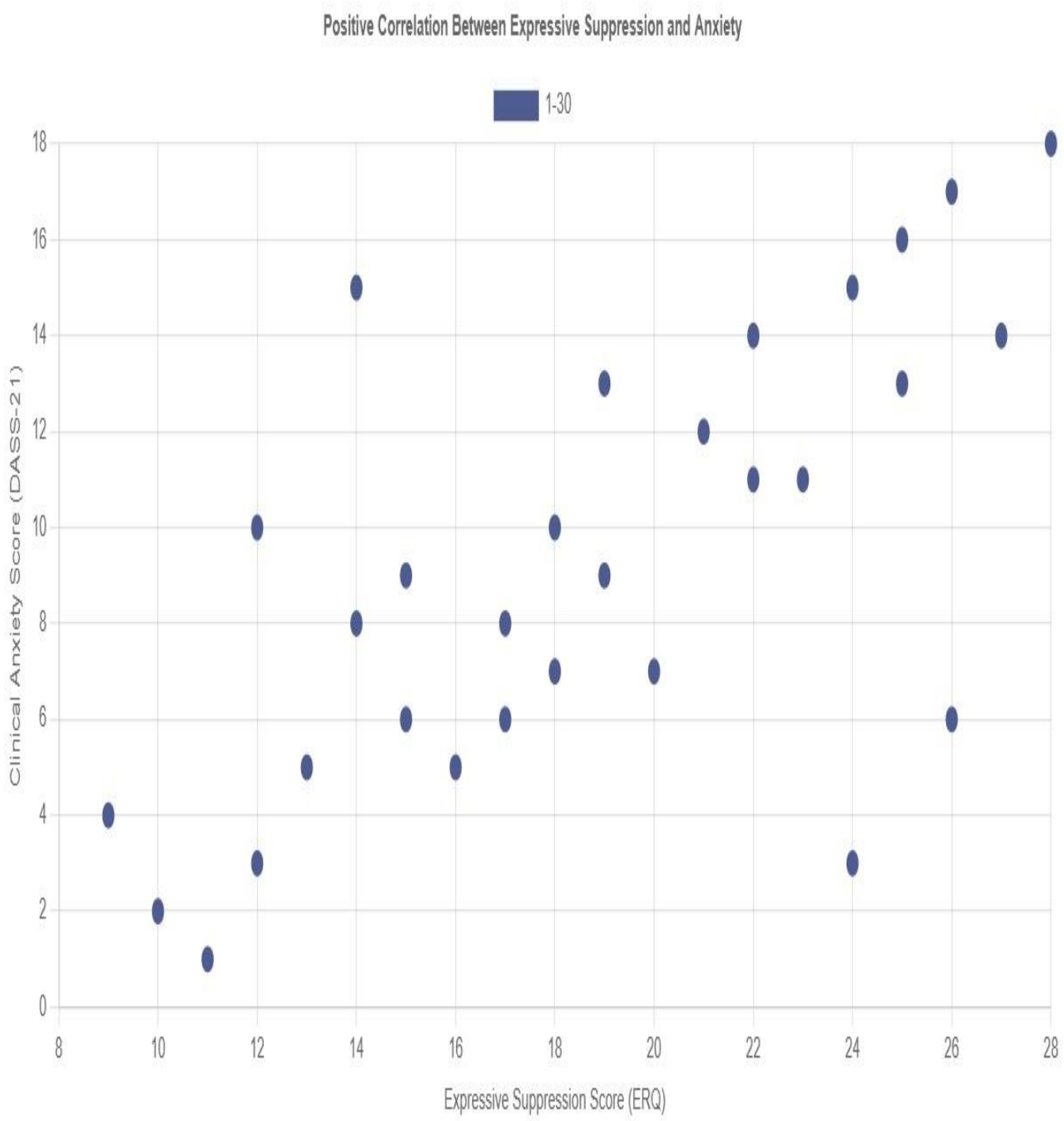

Figure 4: *Positive Correlation Between Expressive Suppression and Anxiety (r = 0.36).*

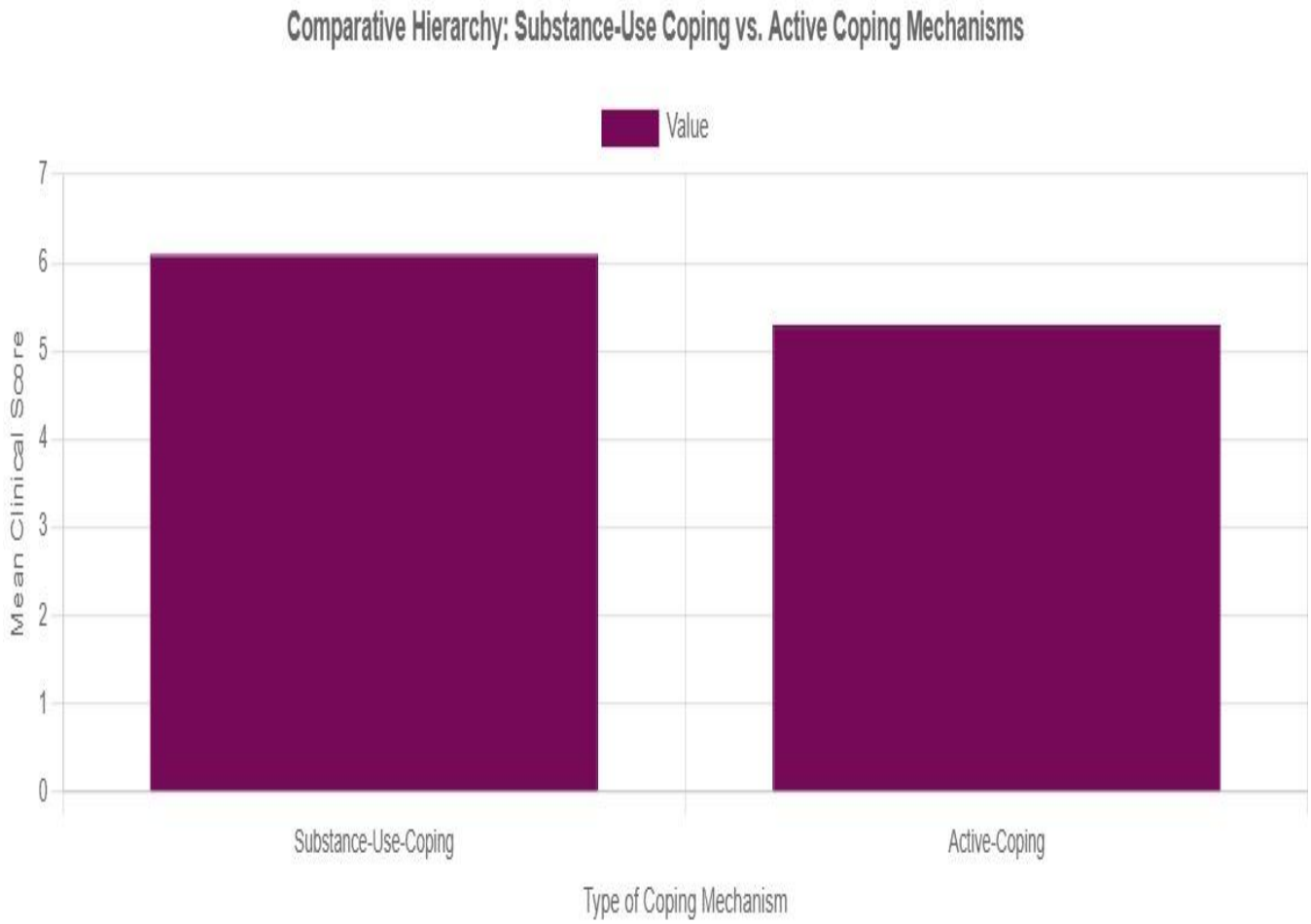

Figure 5: *Comparative Hierarchy: Substance-Use Coping vs. Active Coping Mechanisms.*

CHAPTER V: DISCUSSION

Contextualizing the statistical data within the lived realities of the clinical sample, this discussion will explicate the precise psychological mechanisms that drive the "Relapse Gap." The findings of this study provide crucial insights into how emotional dysregulation and maladaptive coping strategies interact, ultimately highlighting the profound influence of the Indian socio-cultural environment on addiction recovery.

5.1 The "Suppression Paradox"

The central and most clinically urgent finding of this research is the empirical validation of the "Suppression Paradox" within the Bengaluru rehabilitation cohort. Traditional therapeutic models often implicitly or explicitly encourage patients to exert "willpower" over their cravings, effectively demanding that they suppress their addictive urges. However, the data from this study proves that this approach is fundamentally flawed and actively dangerous.

The descriptive statistics revealed a severe over-reliance on Expressive Suppression ($M = 17.4$), indicating that the primary psychological defense mechanism for these patients is the deliberate masking of their internal emotional states. Crucially, the inferential statistics demonstrated a significant positive correlation between this Expressive Suppression and clinical Anxiety ($r = 0.36$). This correlation forms the crux of the suppression paradox: the very mechanism the patient uses to appear "strong" and under control is actively generating the autonomic hyperarousal that precipitates a relapse.

When an individual attempts to suppress an intense emotional state, they do not extinguish the emotion; they merely block its behavioral expression. According to the Modal Model of Emotion (Gross, 1998), this late-stage response modulation requires immense cognitive effort and triggers a severe physiological rebound effect. The trapped emotional energy hyper-sensitizes the amygdala, leading to escalating anxiety and the sensation of a psychological "pressure cooker." In the clinical setting, a patient utilizing suppression might outwardly appear compliant and calm, leading clinicians and family members to falsely believe they are stable. In reality, their internal anxiety is skyrocketing, inevitably pushing them toward the only reliable release valve they possess: the substance. Therefore, the data dictates that clinical definitions of "strength" in recovery must be entirely redefined from stoic suppression to active emotional processing.

5.2 The Hierarchy of Coping

The stress-coping paradigm established in this study further illuminates the behavioral trajectory of relapse. The Brief-COPE inventory data revealed a distorted and highly dangerous coping hierarchy among the sample population. Substance-Use Coping emerged as the dominant strategy (M = 6.1), while Active Coping mechanisms were severely underutilized (M = 5.3).

This disparity is not merely a behavioral choice; it is the result of profound "Cognitive Priming." Chronic substance abuse physically alters the brain's reward circuitry and executive functioning centers, primarily the prefrontal cortex. When these patients encounter the moderate levels of Depression (M = 8.9) and Stress (M = 8.3) measured by the DASS-21, their damaged executive functioning cannot easily conceptualize or execute complex, multi-step Active Coping strategies (such as seeking instrumental support, planning, or cognitive reframing). Instead, their neurologically primed brain immediately defaults to the path of least resistance: Substance-Use Coping.

Active Coping requires the patient to tolerate the distress while simultaneously working to resolve it—a dual cognitive load that is often impossible during early abstinence. Consequently, the high Substance-Use Coping score is not indicative of a lack of moral character, but rather a catastrophic failure of available psychological resources. Bridging the "Relapse Gap" requires clinicians to actively scaffold these resources, systematically building the patient's capacity for Active Coping before the environmental demands overwhelm them.

5.3 The Psychology of the Indian Patient: Sociocultural Influences on Emotion and Relapse

The Collectivist Paradigm and Emotional Enmeshment to accurately interpret the psychometric data of this study, it is imperative to view the results through the lens of the Indian socio-cultural fabric. Unlike Western psychological models, which are predicated on extreme individualism and personal autonomy, the Indian psychological landscape is deeply collectivist. The fundamental unit of society is not the individual, but the family. This collectivist orientation profoundly alters how emotions are experienced, expressed, and regulated.

In the Indian context, emotional expression is rarely a private affair; it is tightly bound to familial expectations and social harmony. There is a high degree of "enmeshment," where the boundaries between individual emotional states and family reputation are porous. Consequently, when a patient experiences severe emotional distress—such as the depression and anxiety measured in this study—they often filter their response through

the anticipated reaction of their family. If expressing vulnerability is perceived as a burden to the family or a threat to collective harmony, the patient will instinctively default to Expressive Suppression. The exceptionally high suppression scores (M = 17.4) are therefore not just a clinical symptom, but a deeply ingrained cultural survival mechanism.

Societal Stigma and the Moralization ofIllness the reliance on avoidant coping strategies in this cohort is inextricably linked to the severe social stigma surrounding Alcohol and Substance-Use Disorders in India. Despite medical advancements, addiction is still overwhelmingly viewed by the broader Indian society as a moral failing, a sign of weak character, and a direct reflection of poor upbringing. The diagnosis carries a profound sense of *shame*—a toxic, internalized emotion that differs significantly from guilt. While guilt says "I did a bad thing," shame dictates "I am a bad person."

This societal moralization creates a hostile environment for genuine emotional processing. Patients entering rehabilitation centers in Bengaluru are often hyper-aware of the judgment they face from extended relatives, neighbors, and professional colleagues. This perceived stigma forces the disease underground. Patients learn to utilize secrecy, denial, and behavioral disengagement—all facets of avoidant coping—to shield themselves and their families from societal ostracization. The positive correlation between suppression and anxiety is actively fueled by this constant, exhausting vigilance against being "found out."

The "Be Strong" Mandate: Toxic Stoicism in Urban India in fast-paced, highly competitive urban environments like Bengaluru, the pressure to perform professionally and maintain the facade of a successful life is immense. For the demographic represented in this study, there exists a pervasive, unspoken cultural mandate to "be strong." Emotional vulnerability, particularly among men who are expected to act as the primary providers and stoic pillars of the family, is frequently equated with weakness or incompetence.

When clinical professionals or family members tell an individual navigating the agonizing "Relapse Gap" to "be strong," they are inadvertently commanding the patient to deploy Expressive Suppression. The data from this thesis proves empirically that this culturally sanctioned stoicism is a toxic illusion. The higher the reliance on this "fake strength," the higher the patient's internal anxiety (r = 0.36) and the closer they inch toward a catastrophic relapse. This finding demands a radical shift in how Indian families and clinicians conceptualize resilience, moving away from silent endurance toward active emotional articulation.

Family Dynamics: *Codependency and the Shield of Secrec***y** The psychological profile of the Indian patient cannot be separated from the psychological profile of their family. Addiction is a systemic disease that traumatizes the entire family unit, frequently leading to profound co-dependency. In an attempt to protect the addicted individual (and the family's social standing), family members often engage in enabling behaviors—paying off debts, covering up absences from work, and making excuses to extended family.

While rooted in love and a desire to protect, these dynamics create an environment where open, honest communication about emotional distress is virtually impossible. The family essentially colludes in the patient's use of Expressive Suppression. When the patient returns home from a 21- or 90-day rehabilitation program, they often return to a family system that is terrified of "triggering" a relapse. This fear results in families walking on eggshells, further isolating the patient. Without family psychoeducation, the patient remains

trapped in an emotionally sterile environment, unable to practice the Cognitive Reappraisal skills necessary to navigate their stress, thereby ensuring the cycle of relapse continues.

The Role of Fatalism and External Locus of Control finally, the low scores in Active Coping (M = 5.3) must be examined in light of certain cultural paradigms regarding destiny and control. While not universally applicable, there can exist a subtle undercurrent of fatalism in some Indian cultural narratives—the belief that one's suffering is predetermined (often linked to misunderstood concepts of karma) and that fighting against it is futile.

This external locus of control severely undermines the foundational premise of Active Coping and Cognitive Reappraisal, both of which require the patient to believe they have the agency to change their psychological state. If a patient internalizes the belief that their addiction is an insurmountable destiny or a permanent curse, they will naturally score low on active problem-solving and high on behavioral disengagement. Overcoming this requires highly localized psychotherapeutic interventions that honor the patient's cultural background while simultaneously empowering them with an internal locus of control, teaching them that their emotional responses are highly malleable processes, not predetermined events.

CHAPTER VI: SUMMARY AND CONCLUSION

6.1 Overview

This final chapter serves as the comprehensive synthesis and culmination of the empirical investigation into the psychological mechanics of addiction recovery. The primary objective of this dissertation was to systematically examine emotional regulation strategies and coping mechanisms as definitive predictors of relapse among individuals diagnosed with Alcohol and Substance-Use Disorders (AUD/SUD). The study was specifically localized within the fast-paced, urban clinical context of Bengaluru, India.

Historically, both Western and Indian rehabilitation models have heavily prioritized the physiological and biomedical dimensions of addiction, allocating the vast majority of clinical resources to acute medical detoxification. However, the chronically high rates of recidivism—often occurring weeks or months after the physiological dependence has been broken—indicate a profound failure in contemporary treatment paradigms. This failure lies in the inability to address the "Relapse Gap." This term conceptualizes the highly vulnerable, post-detoxification period wherein a patient is physically sober but remains emotionally dysregulated, lacking the psychological scaffolding required to navigate an inherently stressful world.

By utilizing a quantitative correlational design and deploying a rigorous battery of standardized psychometric tools (the DASS-21, the ERQ, and the Brief-COPE inventory), this research sought to mathematically quantify how specific deficits in emotional processing directly precipitate a return to substance use. This chapter provides an exhaustive summary of those clinical findings, draws overarching theoretical conclusions regarding the Indian patient profile, outlines the profound clinical implications of the data for treatment facilities, acknowledges the methodological limitations inherent to the current study, and proposes targeted, actionable avenues for future psychological research.

6.2 Summary of Findings

The empirical data extracted from the purposive clinical sample (N = 30) yielded several critical, statistically significant findings that accurately map the psychological trajectory of relapse. These findings fundamentally challenge the assumption that relapse is a random event or a mere failure of moral willpower.

- **High Baseline of Unmanaged Psychological Morbidity:** The descriptive statistics derived from the Depression, Anxiety, and Stress Scale (DASS-21) revealed a deeply concerning affective baseline. The clinical cohort continuously operates at a level of Moderate Depression (M = 8.9) and Moderate Stress (M = 8.3). This establishes that the primary threat to sustained sobriety is not merely the physiological craving for a chemical, but the intense, underlying psychiatric distress that predates and sustains the behavioral addiction. Patients are waking up in rehabilitation centers already burdened by significant dysphoria and nervous arousal, meaning they are starting every day at a psychological deficit.

- **The Inversion of the Coping Hierarchy:** The data extracted from the Brief-COPE inventory demonstrated a dangerous, systemic distortion in the patients' active problem-solving repertoires. The sample exhibited a heavy, historically ingrained reliance on avoidant mechanisms, specifically Substance-Use Coping, which recorded the highest mean (M = 6.1). This was juxtaposed against a severe and dangerous deficit in Active Coping mechanisms (M = 5.3). This statistical inversion proves that physical detoxification leaves the patient cognitively defenseless against environmental stressors. Without the executive functioning required to plan, seek instrumental support, or problem-solve, the neurologically primed brain instinctively defaults to its most effective historical tool: the substance.

- **Empirical Validation of the "Suppression Paradox":** The most urgent and clinically vital finding of this research is the quantifiable danger of Expressive Suppression. The sample demonstrated a severe over-reliance on this maladaptive emotion regulation strategy, yielding a massive mean score (M = 17.4) on the Emotion Regulation Questionnaire (ERQ). Furthermore, the Pearson correlation matrix revealed a statistically significant positive correlation between Expressive Suppression and clinical Anxiety (r = 0.36). This mathematically proves that attempting to "white-knuckle," mask, or hide emotional distress actively magnifies autonomic hyperarousal. Suppression acts as a psychological pressure cooker, trapping the emotional energy until it triggers a catastrophic behavioral relapse.

- **Cognitive Reappraisal as a Primary Neurological Buffer:** In stark contrast to suppression, the study identified a crucial negative correlation between Cognitive Reappraisal and Depression (r = -0.32). This establishes active cognitive reframing as the paramount protective factor during early abstinence. Patients who possess the executive capacity to consciously alter the trajectory of their emotional responses—reframing a severe craving as a temporary neurobiological spike rather than a permanent

state of suffering—are significantly insulated against the dysphoria that typically precipitates substance use.

6.3 Conclusion

The journey from active addiction to sustained sobriety is fundamentally a test of emotional endurance, not merely a test of pharmacological detoxification. This research definitively concludes that when patients are abandoned in the "Relapse Gap" without the necessary cognitive tools to actively reappraise and tolerate their internal distress, their return to substance use is a statistical probability. Addiction is an emotional regulation disorder disguised as a substance use problem.

Furthermore, this study concludes that the clinical pathology of the Indian patient is inextricably linked to their sociocultural environment. The data highlights a tragic reality: the high reliance on Expressive Suppression and avoidant coping is largely driven by external societal pressures. The intense stigmatization of addiction in India, coupled with rigid familial demands to protect collective honor and maintain a stoic, successful facade, actively discourages authentic emotional processing. The culturally sanctioned mandate for men and women to "be strong" inadvertently forces these patients into the dangerous, cyclical trap of Expressive Suppression. Therefore, relapse in this demographic is often the tragic end-result of a patient buckling under the immense pressure of unexpressed, stigmatized emotional pain. True recovery requires a radical shift away from behavioral avoidance and toward active, mindful emotional tolerance.

6.4 Implications

The findings of this study carry profound theoretical, clinical, and systemic implications for the field of clinical psychology, demanding an immediate evolution in how rehabilitation is conceptualized and executed in India.

- **Theoretical Implications:** This research bridges a critical gap in the existing literature by contextualising James Gross's (1998) Modal Model of Emotion within a non-Western, collectivist clinical framework. It demonstrates that theories of emotion regulation cannot be divorced from cultural paradigms. The empirical data proves that in the Indian context, Expressive Suppression is not merely an individual, isolated psychological choice, but a systemic, culturally enforced survival mechanism that paradoxically fuels psychopathology. This expands the global understanding of how culture dictates emotional pathology.

- **Clinical Implications for Treatment Protocols:** Standard, generic rehabilitation protocols—which often rely heavily on 12-step models, basic counseling, and physical detox—are clinically insufficient for this demographic. Treatment centers must aggressively pivot toward Dialectical Behavior Therapy (DBT) and Acceptance and Commitment Therapy (ACT). Because standard cognitive-behavioral therapies demand a level of executive functioning the neurologically compromised patient does not yet possess, DBT's specific modules on "Distress Tolerance" and "Radical Acceptance" are urgently required to neutralize the Suppression Paradox identified in this study.

- **Systemic Implications for Family Interventions:** Because the Indian patient is deeply enmeshed within the family unit, treating the addicted individual in isolation is a clinical half-measure that virtually guarantees relapse. Rehabilitation centers must mandate intensive Family Psychoeducation. Families must be explicitly taught that commanding a recovering addict to "just get over it" actively triggers the hyperarousal that leads to relapse. Psychoeducation must systematically transition the home environment from one of secrecy, shame, and codependency to one of emotional transparency and active validation.

6.5 Limitations

While this research provides robust, highly actionable insights into the mechanics of relapse, certain methodological limitations must be acknowledged to properly contextualize the findings and ensure academic integrity:

- **Sample Size and Generalizability Constraints:** The sample size (N = 30), while mathematically sufficient for establishing initial correlational baselines within a specific, purposive clinical cohort, inherently limits the broad generalizability of the findings. The urban, high-pressure environment of Bengaluru does not necessarily reflect the socio-economic and cultural realities of rural Indian populations, where access to substances and societal stressors differ vastly.

- **Limitations of a Cross-Sectional Design:** The study utilized a cross-sectional correlational design, capturing a specific, static snapshot of psychological functioning during the 21- to 90-day rehabilitation window. While strong correlational trajectories (such as the link between suppression and anxiety) were established, true causation cannot be definitively proven without an experimental framework. It cannot be categorically stated that suppression *caused* the anxiety; they merely co-occur at highly significant rates.

- **Inherent Self-Report Bias in High-Stigma Environments:** The reliance on self-report psychometric inventories (DASS-21, ERQ, Brief-COPE) introduces the potential for social desirability bias. Given the high levels of societal stigma surrounding addiction in India, and the pervasive cultural habit of Expressive Suppression confirmed by the data, it is highly probable that participants unconsciously underreported the true severity of their psychiatric distress. The recorded moderate levels of depression and stress may actually represent a conservative estimate of the true clinical reality.

6.6 Recommendations for Future Research

To build upon the empirical foundation established by this dissertation, and to continue advancing the efficacy of addiction treatment in India, future psychological research should pursue the following avenues:

- **Longitudinal Tracking Methodologies:** Future studies must transition from cross-sectional designs to robust longitudinal frameworks. Researchers should track patient cohorts from their initial admission through a 12-to-24-month post-discharge period. This would allow the field to definitively measure how baseline emotional regulation scores at discharge predict exact relapse timelines in the real world, fully establishing causation.

- **Gender-Specific Analyses of Emotion Regulation:** Given the unique, heavily gendered sociocultural expectations in India—where female addiction carries a vastly different and often more severe social stigma than male addiction—future research must investigate whether the "Suppression Paradox" and coping hierarchies manifest differently across genders. Understanding these nuances is critical for developing gender-responsive treatment protocols.

- **Neuroimaging and Biological Markers:** Future research should aim to pair these psychometric tools with neurobiological assessments. Utilizing fMRI technology or measuring cortisol levels in Indian patients actively utilizing Expressive Suppression versus Cognitive Reappraisal would provide irrefutable biological evidence of the psychological phenomena recorded in this study.

- **Intervention Efficacy Trials:** Experimental, Randomized Controlled Trials (RCTs) are urgently required within Indian rehabilitation centers. Researchers must directly compare the long-term relapse rates of patients treated with standard Relapse Prevention (RP) models versus those treated with specifically tailored, mindfulness-based Distress Tolerance protocols like DBT.

REFERENCES

Aldao, A., Nolen-Hoeksema, S., & Schweizer, S. (2010). Emotion-regulation strategies across psychopathology: A meta-analytic review. *Clinical Psychology Review*, *30*(2), 217–237. https://doi.org/10.1016/j.cpr.2009.11.004

Bandura, A. (1999). A sociocognitive analysis of substance abuse: An agentic perspective. *Psychological Science*, *10*(3), 214–217. https://doi.org/10.1111/1467-9280.00138

Benegal, V. (2005). India: Alcohol and public health. *Addiction*, *100*(8), 1051–1056. https://doi.org/10.1111/j.1360-0443.2005.01176.x

Berking, M., Margraf, M., Ebert, D., Wupperman, P., Hofmann, S. G., & Junghanns, K. (2011). Deficits in emotion-regulation skills predict alcohol use during and after cognitive-behavioral therapy for alcohol dependence. *Journal of Consulting and Clinical Psychology*, *79*(3), 307–318. https://doi.org/10.1037/a0023421

Bowen, S., Witkiewitz, K., Clifasefi, S. L., Grow, J., Chawla, N., Hsu, S. H., Douglas, H., Harrop, E., Collins, S. E., Lustyk, M. K., & Larimer, M. E. (2014). Relative efficacy of mindfulness-based relapse prevention, standard relapse prevention, and treatment as usual for substance use disorders: A randomized clinical trial. *JAMA Psychiatry*, *71*(5), 547–556. https://doi.org/10.1001/jamapsychiatry.2013.4546

Brown, S. A., Vik, P. W., Patterson, T. L., Grant, I., & Schuckit, M. A. (1995). Stress, vulnerability and adult alcohol relapse. *Journal of Studies on Alcohol*, *56*(5), 538–545. https://doi.org/10.15288/jsa.1995.56.538

Carver, C. S. (1997). You want to measure coping but your protocol's too long: Consider the Brief COPE. *International Journal of Behavioral Medicine*, *4*(1), 92–100. https://doi.org/10.1207/s15327558ijbm0401_6

Chand, P. K., Murthy, P., & Sharma, J. C. (2014). Sociodemographic and clinical profile of patients seeking treatment for substance use disorders in a tertiary care center in India. *Indian Journal of Psychological Medicine*, *36*(2), 143–148. https://doi.org/10.4103/0253-7176.130971

D'Avanzato, C., Joormann, J., Siemer, M., & Gotlib, I. H. (2013). Emotion regulation in depression and anxiety: Examining diagnostic specificity and stability of strategy use. *Cognitive Therapy and Research*, *37*(5), 968–980. https://doi.org/10.1007/s10608-013-9536-4

Dhawan, A., Rao, R., Ambekar, A., Pattanayak, R. D., & Chopra, A. (2017). Treatment of substance use disorders through the government health system in India. *Indian Journal of Psychiatry*, *59*(3), 380–384. https://doi.org/10.4103/psychiatry.IndianJPsychiatry_23_17

Fox, H. C., Hong, K. I., & Sinha, R. (2007). Difficulties in emotion regulation and impulse control in recently abstinent alcoholics compared with social drinkers. *Addictive Behaviors*, *33*(2), 388–394. https://doi.org/10.1016/j.addbeh.2007.10.002

Gossop, M., Stewart, D., Browne, N., & Marsden, J. (2002). Factors associated with abstinence, lapse or relapse to heroin use after residential treatment: Protective effect of coping responses. *Addiction*, *97*(10), 1259–1267. https://doi.org/10.1046/j.1360-0443.2002.00227.x

Gross, J. J. (1998). The emerging field of emotion regulation: An integrative review. *Review of General Psychology*, *2*(3), 271–299. https://doi.org/10.1037/1089-2680.2.3.271

Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology*, *85*(2), 348–362. https://doi.org/10.1037/0022-3514.85.2.348

Hasking, P., Lyvers, M., & Carlfass, C. (2011). The relationship between coping strategies, alcohol expectancies, drinking motives and drinking behaviour. *Addictive Behaviors*, *36*(5), 479–487. https://doi.org/10.1016/j.addbeh.2011.01.014

Kashdan, T. B., Barrios, V., Forsyth, J. P., & Steger, M. F. (2006). Experiential avoidance as a generalized psychological vulnerability: Comparisons with coping and emotion regulation strategies. *Behaviour Research and Therapy*, *44*(9), 1301–1320. https://doi.org/10.1016/j.brat.2005.10.003

Khantzian, E. J. (1997). The self-medication hypothesis of substance use disorders: A reconsideration and recent applications. *Harvard Review of Psychiatry*, *4*(5), 231–244. https://doi.org/10.3109/10673229709030550

Kober, H., Mende-Siedlecki, P., Kross, E. F., Weber, J., Mischel, W., Hart, C. L., & Ochsner, K. N. (2010). Prefrontal-striatal pathway underlies cognitive regulation of craving. *Proceedings of the National Academy of Sciences*, *107*(33), 14811–14816. https://doi.org/10.1073/pnas.1007779107

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer Publishing Company.

Litt, M. D., Kadden, R. M., Kabela-Cormier, E., & Petry, N. M. (2007). Coping skills training and contingency management treatments for marijuana dependence: Exploring mechanism of action through mediator analysis. *Journal of Consulting and Clinical Psychology*, *75*(1), 98–112. https://doi.org/10.1037/0022-006X.75.1.98

Lovibond, S. H., & Lovibond, P. F. (1995). *Manual for the Depression Anxiety Stress Scales* (2nd ed.). Psychology Foundation of Australia.

Marlatt, G. A., & George, W. H. (1984). Relapse prevention: Introduction and overview of the model. *British Journal of Addiction*, *79*(3), 261–273. https://doi.org/10.1111/j.1360-0443.1984.tb00274.x

Mattoo, S. K., Chakrabarti, S., & Anjaiah, M. (2013). Psychosocial factors associated with relapse in men with alcohol or opioid dependence. *Indian Journal of Medical Research*, *137*(4), 704–711.

Murthy, P., Manjunatha, N., Subodh, B. N., Chand, P. K., & Benegal, V. (2010). Substance use and addiction research in India. *Indian Journal of Psychiatry*, *52*(Suppl 1), S189–S199. https://doi.org/10.4103/0019-5545.69232

Nayak, S., Sharma, P., & Singh, S. (2019). Perceived stigma, family support, and coping mechanisms among patients with substance use disorders in India. *Asian Journal of Psychiatry*, *43*, 8–13. https://doi.org/10.1016/j.ajp.2019.05.004

Roos, C. R., Bowen, S., & Witkiewitz, K. (2017). Baseline distress tolerance mediates the relationship between baseline negative affect and coping motives for substance use. *Addictive Behaviors*, *70*, 85–91. https://doi.org/10.1016/j.addbeh.2017.02.016

Sinha, R. (2001). How does stress increase risk of drug abuse and relapse? *Psychopharmacology*, *158*(4), 343–359. https://doi.org/10.1007/s002130100917

Sinha, R. (2011). New findings on biological factors predicting addiction relapse vulnerability. *Current Psychiatry Reports*, *13*(5), 398–405. https://doi.org/10.1007/s11920-011-0224-0

Wills, T. A., Sandy, J. M., & Yaeger, A. M. (2001). Stress and coping in early adolescence: Changes with increasing experience. *Journal of Personality*, *69*(1), 99–133. https://doi.org/10.1111/1467-6494.00136

Witkiewitz, K., & Marlatt, G. A. (2004). Relapse prevention for alcohol and drug problems: That was Zen, this is Tao. *American Psychologist*, *59*(4), 224–235. https://doi.org/10.1037/0003-066X.59.4.224

APPENDICES

Appendix A: Informed Consent

RESEARCH SUBJECT INFORMATION SHEET

This informed consent form is for the participants who have been invited to participate in the research titled: **"Emotional Regulation and Coping Mechanisms as Predictors of Relapse in Alcohol- and Substance-Use Disorders."**

NAME OF PRINCIPAL INVESTIGATOR: Ann Zenobia Abraham, Postgraduate Student, Department of Psychology

RESEARCH SUPERVISOR: Dr Diganta Baishya, Assistant Professor, Department of Psychology

HEAD OF DEPARTMENT: Dr Sruthi Sivaraman, HOD, Department of Psychology

NAME OF ORGANIZATION: Kristu Jayanti College (Autonomous), Bengaluru.

I am Ann Zenobia Abraham, studying as a postgraduate student in the Department of Psychology at Kristu Jayanti College (Autonomous), Bengaluru. I am researching the psychological factors, specifically emotional regulation and coping mechanisms, that influence the recovery and relapse process in individuals navigating rehabilitation. I will give you adequate information and invite you to be a part of this research. You can decide whether or not you will participate in the research. Before you decide, please feel comfortable talking to me about the research.

This consent form may contain words that you do not understand. Please ask me to stop as we go through the information and I will take time to explain. If you have questions later, you can ask them; I will be providing my contact details for the same.

Purpose of the research: The purpose of this research is to understand the "Relapse Gap"—the challenging period following physical detoxification, where individuals are physically sober but often experience intense emotional distress. By examining how individuals process complex emotions (like stress, anxiety, or cravings) and the specific coping strategies they use to manage these feelings, this study aims to uncover the psychological barriers to sustained sobriety. The findings will be highly valuable in informing more effective, emotionally focused treatment protocols and interventions, ultimately contributing to better, more compassionate rehabilitation systems for patients in India.

For demographic factors, we will collect:

- Age and Gender
- Marital Status and Socio-Economic Status
- Primary Substance of Choice
- Number of Previous Rehabilitation Admissions

You are being invited to take part in this research because your lived experience in navigating the recovery process is incredibly valuable. We feel that your honest responses will serve as a crucial tool to help us identify the factual, real-world psychological challenges faced during rehabilitation. Your participation in this research is entirely voluntary. It is your choice whether to participate or not. The choice that you make will have no bearing on your role here. You may change your mind later and stop participating even if you agreed earlier. The information recorded is confidential, your name will not be included in the data collected, and no one else except my supervisor and I will have access to the form. Nothing that you share today or with me will be made public with anybody outside the research, and nothing will be attributed to you by name.

Participation in this study does not pose any risks. There will be no direct benefit to you, but your participation will help us identify the factual details of the concerned experiment.

I am now available to answer any questions.

If you have any questions, you would like to ask later, you may contact me at

Email ID: 23MPSY10@kristujayanti.com

Ann Zenobia Abraham, Department of Psychology

This research proposal has been reviewed and approved by the Department of Psychology, which includes the research scholar and the supervisor at Kristu Jayanti College (Autonomous), Bangalore the rights of the research participants are protected.

Confidentiality and Voluntary Participation: Please be assured that your participation is entirely voluntary. Choosing not to participate will not affect your clinical treatment or standing at this rehabilitation center in any way. Furthermore, all data collected will be kept strictly confidential and anonymous. Your name will not be recorded on any of the questionnaires, ensuring your privacy is completely protected. You have the absolute right to withdraw from the study at any time without providing a reason.

STATEMENT OF CONSENT

I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it, and any questions I have asked have been answered to my satisfaction. I consent voluntarily to be a participant in this study.

Signature of Participant: _____

Date (DD/MM/YYYY): _____

Signature of Researcher: _____

Date (DD/MM/YYYY): _____

Appendix B: Socio-Demographic Sheet

Instructions for the Participant: Please read each item carefully and provide the information that best describes your current situation. Place a tick mark (✓) in the appropriate box or write your answer in the space provided. *Note: Please do NOT write your name on this sheet. All information provided will be kept strictly anonymous and confidential, and will be used solely for the purpose of academic research.*

Participant ID No: _____ *(To be filled by Researcher)*

Date of Assessment: _____

SECTION A: BASIC DEMOGRAPHIC PROFILE

1. Age (in years): _____

2. Gender: [ ] Male [ ] Female [ ] Transgender / Other

3. Marital Status: [ ] Single / Unmarried [ ] Married [ ] Divorced / Separated [ ] Widowed

4. Family Type: [ ] Nuclear Family (Living only with spouse/children or parents) [ ] Joint / Extended Family (Living with extended relatives)

SECTION B: SOCIO-ECONOMIC PROFILE

5. Highest Educational Qualification: [ ] High School / PUC [ ] Diploma / Certification [ ] Bachelor's Degree [ ] Master's Degree or Higher

6. Current Employment Status (Prior to Admission): [ ] Employed Full-Time [ ] Employed Part-Time [ ] Self-Employed / Business Owner [ ] Student [ ] Unemployed

7. Approximate Monthly Family Income (in INR): [ ] Below ₹20,000 [ ] ₹20,001 – ₹50,000 [ ] ₹50,001 – ₹1,00,000 [ ] Above ₹1,00,000

SECTION C: CLINICAL AND SUBSTANCE USE HISTORY

8. Primary Substance of Choice: *(Tick the one that applies most)* [ ] Alcohol [ ] Cannabis (Marijuana / Weed) [ ] Opioids (Heroin / Prescription Painkillers) [ ] Stimulants (Cocaine / Methamphetamine) [ ] Polysubstance (Multiple substances used equally)
[ ] Other: _____

9. Approximate Age of First Substance Use (in years): _____

10. Total Duration of Active Dependence / Heavy Use: _____ (Months / Years)

11. Number of Previous Rehabilitation Admissions: *(Excluding the current stay)* [ ] 0 (This is my first time in rehabilitation) [ ] 1 – 2 times [ ] 3 – 5 times [ ] More than 5 times

12. Current Rehabilitation Program Duration: [ ] 21-Day Program [ ] 90-Day Program [ ] Other: _____

13. Have you ever been previously diagnosed by a doctor with a psychiatric condition? *(e.g., Depression, Anxiety, Bipolar Disorder)* [ ] Yes [ ] No [ ] Unsure

Acknowledgement

First and foremost, I would like to thank Kristu Jayanti College (Autonomous) for giving me the opportunity and resources to conduct this dissertation. The supportive study environment of the institution and dedication to excellence in research have been crucial in being able to successfully complete this dissertation. My heartfelt gratitude goes to the Department of Psychology and the faculty members for their constant guidance, motivation, and academic support. I am particularly thankful to Dr. Sruthi Sivaraman, Head of Department, for her motivation and guidance throughout the course of the dissertation. I would like to express my deepest gratitude to Dr Diganta Baishya for being research guide and for her kind mentorship, expert guidance, and constructive criticism, which have been instrumental in shaping the direction and quality of this research. It was because of her understanding and approachable nature that made even difficult tasks less daunting. I also wish to thank the administrative staff and the clinical directors of the residential rehabilitation centres in Bengaluru who permitted data collection within their facilities. Your dedication to the recovery community is deeply inspiring. To the participants in this study: my utmost respect and gratitude are yours. Thank you for allowing me into your clinical space during one of the most vulnerable and challenging phases of your lives, the "Relapse Gap." Your courage and honesty in sharing your emotional realities form the beating heart of this research. It is my sincere hope that this data contributes to more compassionate and effective treatment protocols for those navigating the difficult path of recovery. Finally, I dedicate this work to my family and friends. Your unwavering emotional support, understanding of my prolonged absences during the writing process, and constant encouragement were my greatest coping mechanisms.

Ann Zenobia Abraham