**Young adult resilience for recovery from substance addiction in Assam, India:**

**Lived experience insights from a photo-led interview study**

Running head: RESILIENCE FOR RECOVERY

Rebecca Graber, PhD, University of Chichester, UK, Psychology and Counselling, University of Chichester, College Lane, Chichester, UK Rebecca.Graber@chi.ac.uk

Raginie Duara, PhD, School of Psychology, University of Leeds, UK r.duara@leeds.ac.uk

Sangeeta Goswami, PhD, MIND India: Institute of Positive Mental Health & Research, Assam, India sangeetamind@gmail.com

Siobhan Hugh-Jones, PhD, School of Psychology, University of Leeds, UK s.hugh-jones@leeds.ac.uk

Diptarup Chowdury, PhD, Lokopriya Gopinath Bordoloi Regional Institute of Mental Health, Tezpur, Assam, India dc.tezpur@gmail.com

\*Anna Madill, PhD, School of Psychology, University of Leeds, UK a.l.madill@leeds.ac.uk ORCID 0000-0002-9406-507 **CORRESPONDING AUTHOR**

**Data Availability Statement**: The data that support the findings of this study are openly available in ReShare at <https://reshare.ukdataservice.ac.uk/855418/>

**Conflict of Interest Statement**: The authors declare no conflict of interest.

**Copyright Statement**: For the purpose of open access, the author has applied a Creative Commons Attribution (CC BY) licence to any Author Accepted Manuscript version arising from this submission.

**Acknowledgements:** This study was funded by the Economic and Social Research Council and Arts and Humanities Research Council Global Research Challenge Fund grant ES/S00047X/1. We are grateful to our participants for generously sharing their time and experiences. We thank colleagues at Nirmaan Rehabilitation Facility and Hope Foundation Rehabilitation Facility. More information at <https://projectresilience.co.uk/>.

**Abstract**

Substance addiction can be considered a form of social injustice grounded in interactions between individual, family, and community-level risk factors. Although prevention and treatment of substance use disorder is a key target of the United Nations sustainable development goal Good Health and Well-Being, many low-and-middle-income countries lack a culturally-validated approach for its management. We contend that a resilience approach may provide a sound basis from which to develop such an approach in non-western, low resource settings. Hence, the aim of this study is to identify factors supporting resilience for recovery from substance addiction in the lived experience of young adults in Assam, India. We used photo-led interviews to centre the lived experience of young adult addicts-in-recovery (11 men, 5 women; 19-24 years) recruited through two rehabilitation services and their networks. Reflexive thematic analysis of the data produced three clusters of themes: (i) precursors to recovery; (ii) repairing relationships; and, (iii) structuring a life of recovery. Findings are discussed and potential areas for intervention are identified to support a multi-level, culturally-informed, community-driven approach to recovery from substance addiction.

**Keywords:** Substance addiction, recovery, photo-elicitation, psychological resilience, peer support, visual methods

**Young adult resilience for recovery from substance addiction in Assam, India:**

**Lived experience insights from a photo-led interview study**

Prevention and treatment of substance use disorder (SUD) is a target (3.5) of the United Nations sustainable development goal Good Health and Well-Being. Many factors are associated with the development of substance misuse including genetic and biological, psychological and behavioural, and sociocultural and environmental. There is a global focus on reducing SUDs in young people to mitigate the potential for lifelong disadvantage (Patel et al., 2018) with particular interest in community approaches given resource efficiencies and the inclusion in the recovery process of family and neighbourhood often severely impacted by the drug misuse of members. The present study explores resilience for recovery from substance addiction in the northeastern Indian state of Assam which is responding actively to early and extensive misuse of substances among young people in the region (Pathak et al., 2017; Singh, 2022).

Substance addiction is a social justice issue: the onset and treatment of misuse and addiction is grounded in interactions between individual, family, and community-based levels of risk. Substance use is a community-level risk that shapes the functioning of social relationships and is associated with processes of socioeconomic marginalisation, while those with an addiction face significant stigma and functional barriers to escaping cycles of misuse (Graber, *in press*; Dekkers et al., 2020; Pisarska et al., 2016). However, much of the research has focused on externalising behaviours (e.g., aggression) rather than, the often less observable, internalizing symptoms (e.g., depression) that are frequently comorbid with substance use (Hussong et al., 2011). Moreover, while it is understood that rapid physiological changes during adolescence can affect “cognitive reasoning, emotional regulation and risk-taking behaviour” (Jiloha, 2017, p. 111), the developmental pathways from early childhood to SUD have received comparatively little investigation. This trajectory may be particularly significant in a country such as India where many young people experience tremendous pressure and competition in education and employment in addition to increasing family responsibilities in early adulthood (Agarwal et al., 2013): responsibilities which may conflict with their personal goals (Duara et al., 2021).

In India, young people most vulnerable to addiction include those with a family history of substance use and/or those with emotional and behavioural problems (Mahanta et al., 2016) and vulnerability can lead to active substance misuse through social pressure. In Guwahati, the largest conurbation in Assam, peer influence, ‘fun,’ and curiosity are key reasons reported for substance use, with highest rates among middle-school children (Goswami, 2015). Early initiation of drug use can have long term detrimental impacts on mental health, physical health, and relationships (Jiloha, 2017).

Indian government policy around substance misuse aims at treatment and harm reduction (Dalal, 2020). Ten Regional Resource and Training Centres assist and mentor more than 400 non-governmental organisations in addiction services (Avasthi & Ghosh, 2019). However, challenges include a focus on managing acute presentation through medical detoxification without long-term rehabilitation support and poor regulation of private rehabilitation facilities. The Assam State Government is seeking to comprehensively address prevention, treatment and rehabilitation (MSJE, 2015). For example, the Scheme of Prevention of Alcoholism and Substance (Drug) Abuse incorporates a range of services for ‘Whole Person Recovery’ to rehabilitate and integrate people recovering from SUD into society through motivation, counselling and after care.

Despite these initiatives, like many low-and-middle-income countries (LMICs), India lacks a culturally-validated approach for the treatment and management of SUD. Global peer recovery programmes, such as Alcoholics Anonymous (AA) and Narcotics Anonymous (NA), have been somewhat indigenized in India through, for example, incorporating different spiritual beliefs into articulations of a ‘higher power’ (Nimmagadda & Chakradhar, 2006). However, a major problem is that even popular psychosocial models of recovery are centred on asset models, identifying a set of formal and informal resources that *individuals* can draw upon to initiate and maintain recovery. That is, focusing on *intra*psychological change rather than supporting conditions at community level. Yet, this approach provides limited scope to examine processes of change operating at ecological levels above the individual and present an often static view of recovery (Rudzinski et al., 2017). Therefore, we contend that a theoretical framework of psychosocial resilience may provide a sound basis from which to develop culturally-appropriate approaches for recovery from SUD.

Psychosocial resilience can be conceptualised in relation to those exposed to significant adversity, as the capacity “to navigatetheir way to the psychological, social, cultural, and physical resources that sustain their well-being, and their capacity individually and collectively to negotiate for these resources to be provided in culturally meaningful ways” (Resilience Research Centre, para 3). We are aware of no existing resilience-based frameworks for *SUD* *recovery* despite successful application of resilience concepts to recovery from other medical conditions and to *prevention* and *prediction* of substance misuse (Graber et al., 2016*;* Wu et al., 2018).

A resilience approach extends SUD recovery research in several ways. First, it sensitizes researchers to identifying protective mechanisms that enhance recovery at psychological, social and cultural levels, as well as acknowledging biological susceptibility (Graber et al., 2016; Hugh-Jones et al., 2024; Liebenberg, 2020; Rudzinski et al., 2017). Second, adaptation is theorised to develop at different rates along different trajectories at these different levels (Masten, 2014). This provides a framework for identifying insights, skills, and resources that may be the result of multiple and circuitous pathways (Miller, 1996; Sau et al., 2013). For example, even navigating phases of relapse can provide lessons relevant to the ultimate goal of recovery (Madill et al., 2022). Finally, a resilience approach prioritises learning from those with lived experience of journeying through challenging circumstances (Rudzinski et al., 2017).

Innovative methods are required to encourage vulnerable people to participate in research in which they are asked to talk about prior illegal, and possibly traumatising, activities and then to generate rich and useful material (Jiloha, 2017; Liebenberg, 2020; Sau et al., 2013). We were drawn to visual methods given evidence that they are able to centre the lived experiences of marginalised people, democratise the power dynamic between researcher and participant (Cornell, Mhkize & Kessi, 2019), and are often experienced by participants as intrinsically rewarding (Reavey, 2021). Specifically, we used photo-led interviews because they have demonstrated utility across multiple health contexts and provide impactful material to engage policymakers with research outcomes (Duara et al., 2022; Duara, Hugh-Jones & Madill, 2022; Evans-Agnew et al., 2022).

In summary, the aim of this study is to identify mechanisms supporting resilience for recovery from substance addiction in the lived experience of young adults in Assam, India.

**Method**

*Ethics.* Ethical approval was obtained from the Ethics Committee of MIND India, and the Ethics Committee of the School of Psychology, University of Leeds, UK. No ethical concerns arose during the research.

*Participants.* Participants were recruited through two rehabilitation facilities and their networks in Guwahati, Assam. Candidates for the study were required to be: (i) Indian nationals; (ii) aged 19-24 years; (iii) in recovery from drug and/or alcohol abuse, being at least one year substance-free; and, (iv) feel well enough to take part in the study. Tobacco-only users were not included given that, in Assam, this is considered unrelated to mental disorder (Pathak et al., 2017). We aimed to recruit more men to reflect the gender ratio in the recovery community of Assam, the final sample comprising 11 men and 4 women. We purposefully recruited for diversity of main substance of addiction (Table 1). Candidates met the Research Fellow (RF) to discuss the study and conditions of consent. If interested continuing, each was provided guidance on collecting images to bring to interview, e.g., avoiding photos of children and of illegal activities.

*Data generation*. Photo-led interviews were conducted between April 2019 and October 2020 in the participant’s preferred language. Verbal consent was audio-recorded prior to interview and participants provided a written copy of the consent form. Consent was reconfirmed when the interview was complete. Interviews commenced by collecting basic demographic information such as age and employment status. The RF then asked: ‘Is there a picture you would like to share first?’ In this way the participant told their story in their own words, embedding the images they had brought in their interview narrative. Prompts were used where appropriate such as, ‘What were your relationships with other people like at this point in your life?’ The interview finished with some reflective questions including, ‘What advice would you give to those trying to tackle alcohol and drug use in young people?’ Audio-recordings were transcribed in English with portions in Assamese translated and checked. Analysis and data generation progressed concurrently, with notes from the analysis fed back into the interview process. For example, a prompt for sharing experiences of current daily functioning was added when analysis suggested more information would be helpful.

*Analytical procedure.* Transcripts were analysed using reflexive thematic analysis, a flexible procedure for identifying patterns of shared meaning in textual data (Braun & Clarke, 2006; 2019). Reflexive thematic analysis is, itself, atheoretical and allows researchers decide the epistemological position in which they wish to operate. The current study takes a contextual constructionist epistemology in which knowledge is considered local, provisional and context dependent (Madill et al., 2000). The implication for this study is that we are careful to describe the ways in which our data was generated and analysed and consider the limitations of transferability of our findings in the discussion.

Three researchers analysed the transcripts as they became available, each transcript assigned to a pair. Independently, each researcher made notes on the transcript, then discussed their observations with the other in that pair. One then produced an analytical summary based on identified patterns, concepts and themes which was refined by the other and agreed. The first author then coded each analytical summary inductively with the aim of identifying and describing mechanisms supporting recovery present in participants’ lived experience, regularly referring back to the original transcripts, with photographs used illustratively. Resilience was used as a sensitising concept to identify protective mechanisms supporting recovery from substance addiction at individual, family, and community levels. This was discussed among the wider research team, with refinements including enhanced consideration of the connections between repairing family relationships and the restructuring of daily life. Finally, the analysis was presented to community partners in Assam consisting of rehabilitation and clinical professionals. They considered the themes clear, usable in recovery programmes, and to have deepened their understanding of their practice.

**Results**

The analysis is presented in three clusters of protective mechanisms pulling together themes with similar conceptual meaning: (i) precursors to recovery; (ii) repairing relationships; and, (iii) structuring a life of recovery. The symbol […] is used where a section mid-quote has been omitted for parsimony, short descriptions of people and places, and non-verbal communication, are provided also in square brackets where this helps understanding, and each quote is indexed with the participant’s pseudonym and gender where M = male and F = female. Table 2 maps the ways in which the cluster themes relate to the level of the individual, family, and community.

*Cluster 1: Precursors to recovery*

Before recovery can begin, there are at least three conditions that must be met: (i) awareness of services; (ii) understanding addiction; and, (iii) interrupting physiological processes. Each spans the level of the individual, family, and community.

*Awareness of services.* Many reported having little to no awareness of services before reaching a crisis point in their addiction. What knowledge they had was often informed by fictional film depictions of asylums and verbal reports of mistreatment*: ‘I thought earlier, “What thing is rehab?”* [*....*] *Some said, “In there, they tie you up and hit you”’* (Dev, M). Encounters with professionals, or family members aware of rehabilitation services, could be pivotal, particularly given the centrality of extended family, but was dependent largely on connections and previous experiences: ‘*I told [my school counsellor] that “I want to quit substances.” She happened to know a person* [*…*] *who now has his own rehab. So through this counsellor I visited the rehabilitation’* (Rahul, M). Although awareness of services is necessary, particular barriers for Assamese women are that most services are for men and entering treatment can be very stigmatising. For example, Munu’s extended family pressured her parents not to let her go, saying “*She is yet to get married. She has a future. Now if a boy comes to see her we cannot say that she has done rehab. We cannot say that she is an* Recovery therefore involves awareness of services, but also the ability and willingness to access those services, which can depend on the family and their perception of implications within the community.

*Understanding addiction.* For many participants, some understanding of addiction was essential to start the recovery journey supported by others who are able to see that help is required: ‘*I was very stuck [sniffs] from every side. That means my brother said too “What is that?” Said, “See dear. Try to understand. There is no point doing all these”* (Smita, F: Figure 1). Moreover, people suffering addiction can experience impulses which lead to antisocial behaviour that contributes to social stigma in that people ‘*directly think like this that,* *“He is a drug addict. He is a criminal”’* (Neo, M). Hence, it is important that the young person can be viewed by their families and communities separately from the destructive behaviours related to their addiction. However, participants and their family often had little or no knowledge about the cycles of substance use or of withdrawal symptoms to realise that intervention was required: ‘*I told them I want to get myself detoxed. And then we- it never really worked and it got worse after that. I was becoming a chronic relapse. After that detox I even told my dad that I am facing this kind of problem and he couldn’t make it out only by my looks*’ (James, M).

*Interrupting physiological processes.* Interrupting the physiology of addiction, often with pharmacological and other medical support, was for many critical to recovery. However, detoxification was usually experienced as insufficient in and of itself. On the other hand, progress from detoxification to long term, meaningful recovery is was extremely difficult as James explained: *‘When he is high I cannot lecture him because nothing will go into his head. I just can give him the address of the meeting rooms or the rehabilitation centres or I can just tell him that, “Look the way you are leading your life. It’s not the way.”* In fact, increased use of substances prior to entering detoxification rehabilitation was common and a sign that recovery involves addressing a complex constellation of underlying issues: ‘*I did that because* […] *I was feeling bad and the thing I love the most is drugs.* *I used to love. I still love. When I take it there is no tension in my head and that too I was entering to give it up. First thing is that I would give this up. I won’t get it ever. I won’t take. Second, I won’t ever find my girlfriend’* (Amit, M). Participants and their family often had to learn that psychosocial work would be necessary to support recovery, despite the orientation of services towards detoxification.

*Cluster 2: Repairing relationships*

Recovery involves the repairing of relationships. This has four facets: (i) developing self-love; (ii) sense of belonging; (iii) wanting to put things right; and, (iv) family adaptation. The first three operate at the level of the individual, ‘sense of belonging’ operating also at the level of the family and community, while as the name suggests, ‘family adaptation’ is at the family level.

*Developing self-love.* Self-love was rarely addressed directly by participants but can be inferred, for example, in the pride taken in improved physical appearance and increasing self-care as recovery progressed: ‘*today at least if I have to go somewhere I can bathe and* [*…*] *wear good clothes* [*…*] *see myself in mirror* [*…*] *but during my addiction time* [*….*] *this photo looking how I was. Long hair all messed up’* (Rishi, M: Figure 2). Some participants expressed motivation to protect their bodies from the ‘*dirty pain’* (Dev, M) of addiction. Self-love could be expressed also through self-compassion, facilitated by an unconditional acceptance within the peer recovery group: ‘*In sharing* [*…*] *everyone* *felt* *this* [*…*] *in this conversation I thought that whatever I did, I did right, whatever I did wrong that also I will take it as good. Without those the right would not have happened’* (Daisy, F).

*Sense of belonging.* The sense of belonging provided by peer communities is important in light of the stigma faced by many young adult addicts-in-recovery finding new friends, employment, education and, for women, marriage. In particular, a critical feature of rehabilitation and community meetings is the provision of friends in recovery who replace former destructive social networks. Participants were counselled to avoid people who are still using substances: ‘*Today I know that if I go out with my using friends I will definitely get the urge to do it’* (Rishi, M). It can be particularly challenging when extended family used alcohol at gatherings but, with skill, this could be negotiated: ‘*[I] said “No, no. If required I’ll leave.” Then they said, “No you don’t have to. We will sit somewhere else”* (David, M)*.* Of particular value to many is mentoring others in recovery, contributing to a social purpose: ‘*I have chosen service* [*…*] *Some people come and tell me that because of you my son has improved. Such things feel good’* (Samar, M).

*Wanting to put things right.* Participants spoke about coming to recognise the negative impact of their addiction on the people around them. While some focused on romantic partners and friends, family members were overwhelmingly the targets of a desire to put things right: ‘*Till then I started understanding a little how much pain will I cause to mom and dad’* (Kevin, M). However, this process often proceeded unevenly as family and friends struggled to trust in improvements, given cycles of contrition and relapse: ‘*Chacha [uncle] started crying. I felt bad. After I felt bad. That day I didn’t smoke. I didn’t take any at night. And again I started having it in the next morning’* (David, M). Shame over damaged relationships can trigger relapse although may in the right circumstances also act as a strong motive to seek support with recovery.

*Family adaptation.* While family-initiated interventions were typically ineffectual, they could be the start of joint responsibility for change, with participants eventually experiencing such attempts as acts of love: ‘*otherwise they would not have treated me, worked hard for me’* (Rishi, M). Families needed to (re-)create a supportive network around love and mutual obligation, for example, Smita describing how responsibility to her brother motivated her to stay clean: ‘*If I have to go for treatment itself for three, four to five months, today who will look after my brother?’* Change might involve (re-)creating a social network in which love and mutual obligation is placed at the centre of family life: ‘*Now the relationship with sister is good* […] W*hen she couldn’t understand something so she would call me* […] *Before she didn’t even used to introduce. Nowadays those things are changed. It feels good’* (Manav, M). However, families often needed support to help them adapt to the recovery process and, at times, relationships could be experienced by the young person as too damaged to maintain: ‘*I don’t want anything from his side- from my father’* (Munu, F).

*Cluster 3. Structuring a life of recovery*

For our participants, recovery requires creating a meaningful life without substances. This involves developing at least three key skills: (i) emotional literacy; (ii) restructuring time; and, (iii) envisioning possibilities. Each spans the level of the individual, family, and community.

*Emotional literacy.* Although some had the advantage of a stable home and financial situation, many participants described a range of adverse circumstances including domestic violence, family addictions, parental bereavement, academic pressure, bullying, unwanted pregnancy and racism. Whatever their background, many came to understand that they had used substances to escape feelings of guilt, shame, and loneliness: ‘*Like normals* *show, cried and all. Addicts* *cannot do that. In addicts* *that stays inside and breaks from within’* (Riza, F). Recovery meant learning new ways to cope and, as David said, ‘*make [my] mind stable’*. This involved attending meetings, conducting emotion inventories, listening to music, meditation, yoga, and confiding in others: ‘*When I am very angry at first I think I will go out and have [substance]. I think so okay? I won’t lie. It comes. I can’t deal with it. My mind is troubled. I dig into my phone* [*…*] *I keep myself amongst people* [*…*] *drive or drive a bike’* (Smita, F).

*Re-structuring time.* Addiction disrupts ordinary routines supporting family and community life such as mealtimes, school attendance, basic self-care, and recreational activities such as sports. Rehabilitation facilities helped reinstate a healthy schedule and understanding that recovery requires sustained commitment made manageable through the attitude of ‘*just for today*’ (Daisy, F): ‘*Just think about today. I won’t take drugs today. Let’s see what will happen tomorrow. So like that, gradually’* (Kevin, M). Learning to combat boredom was a crucial task to avoid relapsing, Rishi noting that *‘if I don’t retain a structure in one day then I will get bored doing the same thing again and again.*’ Some took the opportunity of ‘giving time’ to support others which contributed to developing patience in their own recovery journey. Hence, in stark contrast to the inertia and chaotic time-scape of addiction, participants gained a sense of time unfolding in a series of opportunities to actively reconnect with one’s own life and one’s own body: ‘*I am not like I am just passing time with the things, like just eating, sleeping, keeping away from substances and then it’s done’* (Samar, M: Figure 3).

*Envisioning possibilities.* Sustainable recovery involves having hope for a purposeful and satisfying future involving interpersonal relationships and goals. However, a key lesson is that, in contrast to the intensity of addiction, a meaningful life may feel mundane and ordinary: ‘*I have to do some work. After working so I’ll also want a family. Have to make one’* (Neo, M). Moreover, change can feel impossible, and hope cannot be engineered, as Riza explained: ‘*One can explain to a normal but it cannot be explained to an addict.*’ Hence, role models are essential, with peers in recovery providing a glimpse of a possible future: ‘*They have stayed clean. People have been respecting them. Plus their relationships that once broke down were getting better again. Then I too saw a hope of life’* (Purav, M: Figure 3). Family acceptance and support can also help the young person leave the past behind, stay grounded in the present, and begin to envision a new future: *‘My family comes to know that there is no point of talking about the past so nobody mentions about this* [*…*] *even when there are fights they don’t mention about the things from the past’ (*Rahul, M). All this opened up possibilities for the future: *‘When I undertook treatment I understood that there are some beautiful moments in life which I have never seen. Life is actually very beautiful and being in state of intoxication I was making it bad’* (Rishi, M).

**Discussion**

The aim of this study is to identify mechanisms supporting resilience for recovery from substance addiction in the lived experience of young adults in Assam, India. Resilience was used as a sensitising concept to identify protective mechanisms supporting recovery at individual, family, and community levels. The use of a resilience framework addresses a need for more contextually-sensitive approaches to highlight under-researched processes of recovery from substance misuse, drawing directly from the lived experiences of this socially marginalised group (Graber, *in press*;Rudsinksi et al., 2017). We now discuss each cluster, the implications of our findings, reflect on the strengths and limitations of the study

*Precursors to recovery.* First, it is often the young person’s family who are pivotal in initiating the recovery journey through finding out about, securing, and funding rehabilitation services. This reflects the importance of extended family in low resource settings such as Indian (Duara, Hugh-Jones, & Madill, 2023; Nimmagadda & Chakradhar, 2006). Second, it is important for the young person, their family, and community organisations to gain some understanding of the addiction process. This can facilitate the young person to accept that a problem exists and to use the support available. Some knowledge of addiction also allows extended family to contextualise past behaviour and to have realistic expectations about recovery. Furthermore, it is important that community organisations, such as schools, recognise the signs of addiction, such as patterns of disengagement, to get young people appropriate support (White, 2019). Finally, it is vital to understand that medical detoxification is rarely an effective standalone and that extended psychosocial support is usually required to maintain sobriety (Best & Hamer, 2021).

*Repairing relationships.* First, self-love is a focus of many peer recovery programmes and can provide a basis for reaching out to repair damaged relationships (Kissman & Maurer, 2002). Aspects of self-love, such as positive self-concept, are known to contribute to SUD recovery in non-western samples, such as in China (Chen et al., 2020). However, our community partners suggest that promotion of self-love tends not to be a central feature of Hindu, Muslim or Christian spiritual practices in Assam. In recovery groups, this may be addressed indirectly through practices of connecting with a higher power or non-judgmental group interactions (Kissman & Maurer, 2002) and may explain why our participants implicated the idea of self-love indirectly, for example through reinvesting in their appearance. It may be that this accommodates aspects of Assamese culture by providing families with a newly presentable young adult who reflects well on them within the community. This is a potentially important re-contextualisation of the concept of self-love appropriate to non-western settings in which the personal change of one individual is highly interwoven with social networks.

Second, young people need to achieve a sense of belonging to replace troubled peer relationships centred on substance misuse. Peer recovery groups frequently meet this need, the sharing of personal experiences creating a sense of connectedness and validation alongside greater understanding of recovery, modification of emotional and behavioural responses, and stigma reduction (Rennick-Egglestone et al., 2019; Smith-Merry et al., 2011).

Third, motivation to repair relational damage underpins recovery practices such as making an emotional inventory. Recognising the pain of dysfunctional romantic relationships and the loneliness inherent to social groups structured around substance use, are recognised as recovery motivators alongside the (re)establishment of constructive emotions and behaviours towards people with whom one had a loving bond (Patton & Best, 2022). In the most propitious circumstances, the young person’s motivation to put things right is encouraged by family adaptation towards relational restitution, the members supporting each other to sustain change (Kelly & Greene, 2014).

Finally, kinship networks are central to Assamese culture, meaning that the recovery of one member requires adaptation of the whole family, and it is recognised more generally that family support, as well as vocational rehabilitation, can be critical in the prevention of relapse (Sau et al., 2013). Even so, family adaptation can be difficult and require outside support given the likelihood of addiction having damaged relationships (White, 2009). However, as our study demonstrates, if families can be supported to adapt, they can, for example, provide an opportunity for young adult addicts-in-recovery to re-engage caretaking responsibilities which foster meaning, self-respect, and maturity.

*Structuring a life of recovery.* First, our study highlights the value of supporting young addicts-in-recovery to develop emotional literacy to cope better with both internalising experiences (e.g., shame) and externalising impulses (e.g., aggression). Interventions to address destructive internalising factors are already a common focus in SUD prevention (Hussong et al., 2011) and could be extended into the recovery period. This is particularly relevant for adolescents and young adults for whom normal developmental opportunities may have been severely interrupted by addiction. Specifically, for these young people, there may be no ‘normal’ to which to return in terms of their social skills, emotional regulation or abstract reasoning (Silvers et al., 2019).

Second, to create a life with meaning beyond addiction, young adults-in-recovery need to find a way of restructuring their time. During addiction their time was hyper-focused on substance-oriented activities and peer groups, alongside disruption of family, educational, and normal recreational routines. Many participants extolled the value of the routines incorporated into rehabilitation facilities as critical to recovery, providing a means to keep busy and a gateway to providing a service to others. Supporting our findings, other research concurs that rehabilitation programme routines can provide a sense of purpose and of control over the environment that helps sustain abstinence (Stokes, Schultz & Alpaslan, 2018).

Finally, the journey to recovery requires envisioning possibilities for a meaningful future without substances. In this regard, it is important to have role models with sustained sobriety, mended relationships, and meaningful vocation. Provision of such role models is a key function of peer support in recovery settings (Best & Hamer, 2021; Dennis, 2003). Envisioning possibilities is also facilitated by a peer recovery community, such as those provided by AA and NA, who can maintain the belief of a hopeful future despite the challenges entailed.

*Implications.* Our findings suggest that interventions to support young adult resilience for recovery from substance addiction in Assam should be multi-level, culturally-informed, and community-driven. Multi-level means the incorporation of broader public health interventions as well as targeted, intensive support for individuals and peer groups identified as at particular risk for addiction and their family. Culturally-informed means taking the particular strengths and sensitivities of the Assam context, community-driven through leveraging the motivation and commitment of strong social networks operating in the region. A resilience perspective encourages looking beyond individual assets to more social and structural levers of change, and seeing recovery in terms of an ongoing processes instead of a static outcome.

In terms of precursors to recovery, campaigns to enhance awareness of services and understanding of addiction would help combat misinformation about harmful substances, facilitate early identification of problematic substance use, and destigmatise help-seeking (White, 2009). Campaigns should be sensitive to local concerns, such as helping families and community leaders to recognise when support from Ayurvedic doctors or gurus may be insufficient. However, although medical professionals play a critical role through providing initial detoxification treatment, this must be followed by long term psychosocial support in line with SDG 3.5.1 recommendation that interventions for SUD include psychosocial, rehabilitation and aftercare services (UN, 2023). Moreover, effective education needs to engage respectfully with different religions, including the normative use of legal substances such as alcohol, during festivals.

In terms of repairing relationships, drawing inspiration from community in-reach, extended family networks, religious communities, and youth-based organisations can provide opportunities for genuinely attractive substance-free belonging (White, 2009). Importantly, some consideration is required with regard to including addicts-in-recovery in cultural rituals that involve inebriants without prejudicing their sobriety, as has been the focus of recovery support in some Native communities of North America (e.g., Whelshula et al., 2021). Supporting families in their understanding of addiction and in their reintegration of the young addict-in-recovery is likely an effective and economical use of resource.

Finally, structuring a life of recovery is often beyond the ability of any one individual given the many influences outside of their control (Liebenberg, 2020), and requires an approach of community inclusion (WHO, 2021). A resilience framework may be especially useful here. A multi-tiered approach to emotional literacy through schools and community groups is recommended, with additional support to at-risk youth. This can act as a preventative measure as well as supporting the motivation to make amends when in recovery. Service development requires engagement with barriers to use, particularly for women with SUD (Madill et al., 2022). Envisioning possibilities for the future might be promoted through internet-based interventions which are especially engaging for young people (Jiloha, 2017). Finally, economic and cultural interventions providing employment and social opportunities to young adults in-recovery would facilitate hope for the future in line with SDG target 3.5 to strengthen prevention and treatment of substance abuse – and to promote inclusive growth and productive employment for all (UN, 2023).

*Strengths and limitations*: Our recruitment processes via two rehabilitation facilities and their networks means that we may have excluded information about recovery processes outside this context. However, research does indicate that recovery without a structured programme of support is difficult (Best & Hamer, 2021). Moreover, we did not record caste, religious background, or maintenance of sobriety post interview all of which may influence transferability of findings. Experiences of SUD recovery include hard to remember periods of time and sometimes traumatic and/or shameful behaviour that are difficult to communicate (Llewellyn-Beardsley et al., 2019). It is therefore a testament to our photo-led interview methodology that many participants told us that they had felt supported to tell their own story in their own way. Finally, given our limited sample size, and epistemology position of contextual constructionism, we need to be tentative regarding the transferability of our findings to settings beyond Assam.

*Conclusion*: Many LMICs lack a culturally-validated approach for the treatment and management of SUD. Addressing a key area of under-research, this study has identified mechanisms supporting resilience for recovery from substance addiction in the lived experience of young adults in Assam, focusing on what these young people have themselves found meaningful in their recovery. From this we offer recommendations to support recovery from SUD demonstrating that, while intrapsychological assets are necessary, recovery requires also engagement with, and from, families, peer networks, and the community.

**References**

Agarwal, M., Nischal, A., Agarwal, A., Verma, J., & Dhanasekaran, S. (2013). Substance abuse in children and adolescents in India. *Journal of Indian Association for Child and Adolescent Mental Health*, 9(3), 62-79.

Avasthi, A., & Ghosh, A. (2019). Drug misuse in India: Where do we stand and where to go from here? *Indian Journal of Medical Research, 149*(6), 689-692.

Best, D., & Hamer, R. (2021). Addiction recovery in services and policy: An international overview (pp. 717‐73). In N. El-Guebaly G. Carrà, M. Galanter, & A. M. Baldacchino (Eds), *Textbook of Addiction Treatment.* Springer.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77-101.

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health, 11*(4), 589-597.

Chen, M., Zeng, X., & Chen, Y. (2020). Self-concept and abstinence motivation in male drug addicts: Coping style as a mediator. *Social Behavior and Personality, 48*(7), 1-15.

Cornell, J., Mkhize, L., & Kessi, S. (2019). Envisioning photovoice as decolonial feminist praxis (pp. 59-76). In F. Boonzaier & T. van Niekerk (Eds), *Decolonial Feminist Community Psychology*. Springer.

Dalal, P. K. (2020). Changing scenario of addiction psychiatry: Challenges and opportunities. *Indian Journal of Psychiatry, 62*(3), 235-241.

Dekkers, A., De Ruysscher, C. & Vanderplasschen, W. (2020). Perspectives of cocaine users on addiction recovery: a qualitative study following a CRA+ vouchers programme. Drugs: Education, prevention and policy, 27(4), 282-296. https://doi.org/10.1080/09687637.2019.1687647

Dennis, C-L. (2003). Peer support within a health care context: A concept analysis. *International Journal of Nursing Studies*, *40*, 321-332.

Duara, R., Chowdhury, D., Dey, R., Goswami, S., & Madill, A. (2022). Using co-created visually-informed community mental health education in low-and-middle-income-countries: Case study of youth substance misuse in Assam, India. *Health Expectations, 25*(4), 1930-1944.

Duara, R, Hugh-Jones, S, & Madill, A. (2021) 'Forced adulthood': An aspect of 'quarterlife crisis' suffered by young English and Assamese adults. *Qualitative Studies*, *6*(1), 11-37.

Duara, R., Hugh-Jones, S., & Madill, A. (2022). Photo-elicitation and time-lining to enhance the research interview: Exploring the quarterlife crisis of young adults in India and the United Kingdom, *Qualitative Research in Psychology, 19*(1), 131-154.

Duara, R., Hugh-Jones, S., & Madill, A. (2023). Quarterlife crisis in the UK and India: Perceived standards and unfulfilled expectations. *Qualitative Report*, *28*(2), 392-416.

Evans-Agnew, R. A., Rosemberg, M.-A. S., & Boutain, D. M. (2022). Emancipatory photovoice research: A primer. *Health Promotion Practice, 23*(2), 211–220.

Goswami, H. (2015). Substance abuse among youths at Guwahati City, Assam (India): Major instigator and socio-demographic factors. *International Education and Research Journal, 1*(4). Retrieved from <http://ierj.in/journal/index.php/ierj/article/view/35>

Graber, R. (*in press*). Understanding Peer Support in Varying Contexts of Marginalisation: Implications for and Linkages between Formal and Informal Provision*.* In Kumar, U. (Ed.) *The Routledge International Handbook of Psychosocial Resilience, 2nd Edition.* Routledge.

Graber, R., de Visser, R.O., Abraham, C., Memon, A., Hart, A. & Hunt, K. (2016). Staying in the ‘sweet spot’: A resilience-based analysis of the lived experience of low-risk drinking and abstention among British youth. *Psychology & Health, 31*(1), 79-99. doi: 10.1080/08870446.2015.1070852

Hugh-Jones, S., Duara, R., Graber, R., Goswami, S., & Madill, A. (2024). What protects at-risk young people in India from using and abusing substances? A photo-led study of lived experience. *Journal of Adolescent Research*, 0 (0). <https://doi.org/10.1177/07435584241231376>

Hussong, A. M., Jones, D. J., Stein, G. L., Baucom, D. H., & Boeding, S. (2011). An internalizing pathway to alcohol use and disorder. *Psychology of Addictive Behaviors, 25*(3), 390-404.

Jiloha, R. C. (2017). Prevention, early intervention, and harm reduction of substance use in adolescents. *Indian Journal of Psychiatry, 59*(1), 111-118.

Kelly, J. F., & Greene, M. C. (2014). Where there's a will there's a way: A longitudinal investigation of the interplay between recovery motivation and self-efficacy in predicting treatment outcome. *Psychology of Addictive Behaviors, 28*(3), 928-934.

Kissman, K., & Maurer, L. (2002). East meets west: Therapeutic aspects of spirituality in health, mental health and addiction recovery. *International Social* *Work, 45*(1), 35-44.

Liebenberg, L. (2020). Reconsidering interactive resilience processes in mental health: Implications for child and youth services. *Journal of Community Psychology, 48*(5), 1365-1380.

Llewellyn-Beardsley, J., Rennick-Egglestone, S., Callard, F., Crawford, P., Farkas, M., et al. (2019). Characteristics of mental health recovery narratives: Systematic review and narrative synthesis. *PloS One*, 14(3), e0214678-e0214678.

Madill, A., Duara, R., Goswami, S., Graber, R. & Hugh-Jones, S. (2022). Pathways to recovery model of youth substance misuse in Assam, India. *Health Expectations, 26,* 318-328.

Madill, A., Jordan, A., & Shirley, C. (2000). Objectivity and reliability in qualitative analysis: Realist, contextualist and radical constructionist epistemologies. *British Journal of Psychology*, *91*, 1-20. https://doi.org/10.1348/000712600161646

Mahanta, B., Mohapatra, P. K., Phukan, N., & Mahanta, J. (2016). Alcohol use among school-going adolescent boys and girls in an industrial town of Assam, India*. Indian Journal of Psychiatry, 58*(2), 157-163.

Masten, A. S. (2014). Global perspectives on resilience in children and youth. *Child Development, 85*(1), 6-20.

Miller, W. R. (1996). What is a relapse? Fifty ways to leave the wagon. *Addiction, 91,* 15-28.

Ministry of Social Justice & Empowerment (2015). *Central Sector Scheme of Assistance for Prevention of Alcoholism and Substance (drugs) Abuse and for Social Defence Services: Guidelines.* New Delhi: Government of India.

Nimmagadda, J., & Chakradhar, K. (2006). The indigenization of AA interpretations from south India. *Asia Pacific Journal of Social Work and Development, 16*(1), 7-20.

Patel, V., Saxena, S., Lund, C., Thornicroft, G., Baingana, F., et al. (2018). The Lancet commission on global mental health and sustainable development*. The Lancet* (British Edition), 392(10157), 1553-1598.

Pathak, K., Deuri, S. P., Gogoi, V., Sobhana, H., Gautham, M. S., et al. & NMHS collaborators group (2017). *Assam State Report, National Mental Health Survey, 2015-16*. <http://indianmhs.nimhans.ac.in/Docs/statereports/Assam-NMHS-Report.pdf>

Patton, D., & Best, D. (2022). Motivations for change in drug addiction recovery: Turning points as the antidotes to the pains of recovery. *Journal of Drug Issues*. <https://doi.org/10.1177/00220426221140887>

Pisarska, A., Eisman, A., Ostaszewski., K. & Zimmerman, M. (2016). Alcohol and cigarette use among Warsaw adolescents: Factors associated with risk and resilience. *Substance Use & Misuse, 51*(10), 1283-1296. <https://doi.org/10.3109/10826084.2016.1168442>

Reavey, P. (2021). *A Handbook of Visual Methods in Psychology: Using and Interpreting Images in Qualitative Research* (2nd ed.). Routledge.

Rennick-Egglestone, S., Ramsay, A., McGranahan, R., Llewellyn-Beardsley, J., Hui, A., et al. (2019). The impact of mental health recovery narratives on recipients experiencing mental health problems: Qualitative analysis and change model. *PloS One, 14*(12), e0226201-e0226201.

Resilience Research Centre, Accessed 25th May 2023. <https://resilienceresearch.org/about-resilience/#:~:text=%E2%80%9CIn%20the%20context%20of%20exposure,resources%20to%20be%20provided%20in>

Rudzinski, K., McDonough, P., Gartner, R. & Strike, C. (2017). Is there room for resilience? A scoping review and critique of substance use literature and its utilization of the concept of resilience. *Substance Abuse Treatment, Prevention and Policy, 12*(1), 1–35. <https://doi.org/10.1186/s13011-017-0125-2>

Sau, M., Sanyal, S., Manna, N., & Mukherjee, A. (2013). Sociodemographic and substance use correlates of repeated relapse among patients presenting for relapse treatment at an addiction treatment center in Kolkata, India. *African Health Sciences, 13*(3), 791-799.

Silvers, J. A., Squeglia, L. M., Rømer Thomsen, K., Hudson, K. A., & Feldstein Ewing, S. W. (2019). Hunting for what works: Adolescents in addiction treatment. *Alcoholism, Clinical and Experimental Research, 43*(4), 578-592.

Singh, B. (2022, June 26). Assam government to set up SOP to regulate rehabilitation and de-addiction centres. *The Economic Times.* <https://economictimes.indiatimes.com/>

Smith-Merry, J., Freeman, R., & Sturdy, S. (2011). Implementing recovery: An analysis of the key technologies in Scotland. *International Journal of Mental Health Systems, 5*(1), 11-11.

Stokes, M., Schultz, P., & Alpaslan, A. (2018). Narrating the journey of sustained recovery from substance use disorder. *Substance Abuse Treatment, Prevention and Policy, 13*(1), 35-35.

United Nations Department of Economic & Social Affairs. (2023). *Goal 3: Ensure healthy lives and promote well-being for all at all ages*. <https://sdgs.un.org/goals/goal3>

Whelshula, M. M., LaPlante, D. A., Nelson, S. E., & Gray, H. M. (2021). Recommendations for improving adolescent addiction recovery support in six northwest tribal communities. *Journal of Community Psychology, 49*(7), 2922-2937.

White, W. (2019). The mobilization of community resources to support long-term addiction recovery. *Journal of Substance Abuse Treatment, 36,* 146-158.

World Health Organization (2021). *Guidance and technical packages on community mental health services: promoting person-centred and rights-based approaches.* <https://www.who.int/publications/i/item/9789240025707>

Wu, A. M. S., Lau, J. T. F., Mo, P. K. H., & Lau, M. M. C. (2018). Psychological distress and resilience as risk and protective factors of psychoactive substance use among Chinese nonengaged youth. *Journal of Community & Applied Social Psychology, 28*(2), 49-64.

Table 1: Participants in order of interview

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Pseudonym** | **Recruitment source** | **Gender** | **Age (yrs)** | **Main substance** | **Other substances** | **Role at time of interview** | **Interview length (mins)** | **No. of images** |
| Rishi | PO1 | male | 21 | heroin | alcoholinhalants tabletsweed | service provider | 172 | 20 |
| David | PO2 | male | 22 | weed | alcoholcough syrup | service provider | 71 | 7 |
| Manav | PO1 | male | 24 | cocaine | alcoholinhalants weed | student | 138 | 9 |
| James | PO1 | male | 24 | heroin | alcohol inhalants weed | self-employed | 93 | 8 |
| Purav | PO1 | male | 19 | heroin | alcohol inhalants marijuanatablets | service provider | 71 | 33 |
| Rahul | PO1 | male | 19 | alcohol | tablets | student | 55 | 12 |
| Samar | PO1 | male | 22 | cocaine | weed | service provider | 72 | 14 |
| Kevin | PO1 | male | 21 | heroin | alcohol brown sugarweed | service provider | 122 | 16 |
| Neo | PO1 | male | 24 | heroin | alcoholcough syrupweed | service provider | 134 | 7 |
| Munu | PO1 | female | 24 | alcohol | brown sugarweed | service provider | 235 | 10 |
| Amit | PO1 | male | 24 | heroin | alcoholtablets | employed | 89 | 11 |
| Dev | PO1 | male | 21 | alcohol | - | service provider | 78 | 13 |
| Daisy | PO1 | female | 23 | heroin | alcohol, inhalants, tablets, weed | employed | 172 | 10 |
| Riza | PO1 | Female | 24 | alcohol | weed | unemployed | 71 | 7 |
| Smita | PO1 | Female | 23 | alcohol | cannabis, uppers | Self-employed | 138 | 7 |

Table 2: Cluster theme levels of operation and possible intervention

|  |  |  |  |
| --- | --- | --- | --- |
| **Cluster Theme** | **Individual** | **Family** | **Community** |
| Awareness of services | √ | √ | √ |
| Understanding addiction | √ | √ | √ |
| Interrupting physiological processes | √ | √ | √ |
| Developing self-love | √ |  |  |
| Sense of belonging | √ | √ | √ |
| Wanting to put things right | √ |  |  |
| Family adaptation |  | √ |  |
| Emotional literacy | √ | √ | √ |
| Re-structuring time | √ | √ | √ |
| Envisioning possibilities | √ | √ | √ |

Figure 1: Smita’s photograph



Figure 2: Rishi’s photographs



Figure 3: Samar’s photograph (above) and Purav’s photograph (below)

