Article

Familial Disruption and Restoration: Exploring the Role of Methadone Maintenance Treatment in Iranian Male Opioid Abusers

Mehrdad Falavarjani
University of Saskatchewan, Canada

ABSTRACT

This qualitative study examines the familial impact of opioid addiction and the restorative role of Methadone Maintenance Treatment (MMT) among 13 Iranian male outpatients in Esfahan, Iran. Using a descriptive phenomenological approach, the findings reveal a three-stage progression of familial withdrawal—emotional, behavioral, and perceptual—resulting in detachment, conflict, and stigma. Engagement in MMT facilitated emotional regulation and reconnection with family members, highlighting its potential beyond pharmacological stabilization. Cultural values such as family honor and social image both hindered and motivated recovery. The study underscores the need for culturally meaningful engagement rather than direct symptom reduction.

Keywords: Methadone Maintenance Treatment, Opioid Addiction, Family Dynamics, Emotional Withdrawal, Cultural values

INTRODUCTION

Opioid-related substance abuse represents a profound public health and social crisis with far-reaching consequences that extend beyond the individual to affect family systems and community structures deeply (Babor et al., 2019; Lunneblad, 2019). Families of individuals with opioid-use disorders frequently endure emotional distress, financial hardship,

relational disruption, and social stigma, all of which contribute to the destabilization of the family unit, which can destabilize the entire familial unit (Daley, 2013; Fırıncık & Gürhan, 2019; Ramirez-Castillo et al., 2019; Salo & Flykt, 2013).

Daley (2013) outlines six key dimensions through which substance abuse impacts families: emotional burden, economic hardship, relationship discord, family instability, biological-system alterations, and emotional detachment. These effects are compounded by societal stigma, which continues to frame substance abuse through lenses of personal failure and moral weakness, despite growing recognition of its neurobiological and genetic underpinnings (Sloboda et al., 2012). Such stigma not only marginalizes individuals but also isolates families, intensifying psychosocial stress and reducing access to support systems (Shafiei, et al., 2021).

Methadone Maintenance Treatment (MMT) has emerged as a central harm-reduction strategy for opioid dependence, offering physiological stabilization and enabling individuals to re-engage with familial and social roles (Amini et al., 2022; Cascun, 2023; Joseph et al., 2000; O'Byrne & Jeske Pearson, 2019). By mitigating withdrawal symptoms and reducing compulsive drug-seeking behaviors, MMT disrupts cycles of addiction and facilitates improved family functioning. Research shows that MMT reduces high-risk behaviors, enhances psychological well-being, and improves quality of life, with ripple effects that benefit family relationships and social integration (Piacentine, 2013; Schwartz et al., 2019; Underhill et al., 2014).

However, cultural values play a pivotal role in shaping the familial impact of substance abuse and the effectiveness of treatment interventions (e.g., Amini et al., 2022; Shoaa Kazemi et al., 2025). In collectivistic, male-orientated societies such as Iran, substance abuse is often viewed as a source of familial shame, particularly for men, whose behavior is closely tied to family honor (Amini et al., 2022; Shafiei et al., 2021). This cultural framing amplifies stigma, resulting in social exclusion and deterioration of familial relationships, which may hinder engagement with treatment programs like MMT.

Iran's location within the Golden Crescent—a major opium-producing region—combined with socioeconomic pressures, has contributed to high rates of substance abuse. Estimates suggest that 2–3 million Iranians are addicted to various substances, with rising prevalence each year (Nikpour, 2018). Substance abuse in Iran is linked to increased divorce rates, mental health issues, and criminal activity (Amini et al., 2022; Shoaa Kazemi et al., 2025). In response, Iran launched a nationwide harm-reduction initiative in 2002, including the widespread implementation of MMT through the Iranian National Center for Addiction Studies (INCAS). By 2009, over 16,000 centers were operational, offering standardized treatment under the Ministry of Public Health (Nikpour, 2018).

Despite the widespread MMT implementation, limited research has examined its effects on family dynamics within collectivistic cultural contexts. This study seeks to fill that gap by exploring how opioid-related substance abuse influences familial relationships and how participation in MMT may mitigate these impacts. Specifically, the study aims to answer the following research questions: (1) What are the familial consequences of opioid-related substance abuse? and (2) How does engagement in the MMT program affect family relationships and dynamics among individuals with opioid dependence?

METHOD

Participants

Thirteen male outpatients undergoing MMT from three rehabilitation centers in Esfahan, Iran, participated in this study. Out of the 37 centers in the city, three were selected using a *stratified cluster sampling* approach to ensure representation across different service areas. Because socioeconomic conditions vary across Esfahan, the city was divided into three strata (North, South, and Central), and one rehabilitation center was randomly selected from each stratum.

Following the selection of centers, individual participants were recruited using *purposive sampling* (Campbell et al., 2020), this method ensured the inclusion of individuals capable of articulating and reflecting on their experiences before and during MMT. Inclusion criteria required participants to be able to communicate effectively and to demonstrate willingness to discuss personal and family histories related to substance use and treatment.

Female patients declined participation despite receiving full information about the study's purpose. Participants ranged in age from 26 to 55 years (M = 38.23, SD = 8.69). Their average duration of MMT was 14.32 months (SD = 15.63), ranging from 1 to 48 months. All participants had previously undergone at least one drug rehabilitation attempt and were currently receiving treatment for opioid dependence, primarily involving opium and heroin. The average age at initial drug use ranged from 15 to 25 years (M = 32.84, SD = 2.71). Eight participants reported a family history of substance abuse. Six were married, four had children, six were single, and one was divorced. Two participants held higher education degrees (bachelor's and master's). The average duration of substance use prior to treatment was 3.08 years (SD = 2.78).

Procedure

Ethical approval was obtained from the directors of the three selected methadone distribution centers. Technical managers facilitated introductions to participants who met the purposive sampling criteria. Informed consent was obtained both verbally and in writing prior to participation. Interviews were conducted at the centers according to participants' availability, lasting between 45 and 90 minutes (M ≈ 55), and were audio-recorded using a digital recorder. All interviews were conducted in Farsi, transcribed by the author, and translated into English using a back-translation procedure (Yeh & Inman, 2007). To ensure semantic and cultural equivalence, the translation process involved iterative reviews by two bilingual experts who compared source and target texts for meaning consistency, idiomatic accuracy, and cultural appropriateness. Discrepancies were resolved through consensus, and culturally nuanced terms were discussed to preserve participants' intended meanings.

To enhance trustworthiness, four strategies were implemented: 1) Member checking: Key points were summarized during interviews, and transcript excerpts were shared with participants for feedback, 2) Audit trails: All decisions related to recruitment, sampling, transcription, translation, and analysis were systematically documented, 3) Reflexive journaling: Researcher assumptions and reflections were recorded throughout the process

to minimize bias, and 4) Independent verification: Two bilinguals reviewed the translations to ensure accurate and culturally appropriate representation of participants' narratives.

Additionally, detailed descriptions of participant demographics, treatment histories, and clinic contexts were provided to support transferability. Collectively, these procedures strengthened the study's credibility, dependability, and confirmability.

Interview Process and Protocol

Unstructured interviews (Zhang & Wildemuth, 2009) were employed to explore participants' lived experiences, particularly focusing on familial dynamics before and during MMT. This approach allowed for open-ended responses and deeper insight into the emotional and relational dimensions of substance abuse. To foster trust and openness, the counseling interview technique (Whiston, 2012) was used, beginning with rapport-building and a clear explanation of confidentiality and study objectives. Given the sensitive nature of the topic and the cultural context—where substance abuse is often stigmatized and associated with family dishonor—this initial stage was crucial for ensuring informed and voluntary participation (Falavarjani & Yeh, 2018).

Data Analysis

A descriptive phenomenological approach (Whiston, 2012; Falavarjani & Yeh, 2018) was adopted to capture the emotional and familial experiences of participants. This method is particularly suited to exploring complex, emotionally charged phenomena such as substance abuse within collectivistic cultures. Colaizzi (1978) method guided the analysis through six steps: 1) Familiarization: Transcripts were reviewed to identify shared experiences across participants, 2) Extraction: Significant statements related to familial experiences were identified, 3) Formulation: These statements were synthesized into concise meanings, 4) Categorization: Formulated meanings were grouped into broader themes and codes, 5) Construction: A comprehensive description of the phenomenon was developed, and 6) Validation: Themes were refined to ensure clarity and eliminate redundancy. To maintain objectivity, bracketing (Husserl, 2001) was employed, allowing researchers to set aside personal biases and focus on participants' authentic narratives. This approach facilitated a nuanced understanding of how opioid dependence and MMT intersect with familial relationships in a culturally specific context.

RESULTS

Three major categories emerged from participants' lived experiences of substance addiction, organized around a core theme of withdrawal: 1) Emotional withdrawals, 2) Behavioral withdrawals, and 3) Perceptual withdrawals. In total, 25 cluster themes were identified to capture the complexity of these constructs and distill them into the three overarching categories (see Table 1). Participants appeared to progress through these experiences in a developmental sequence—beginning with emotional withdrawals, shifting toward altered perceptions of withdrawal, and ultimately engaging in treatment as a coping and recovery strategy (see Figure 1). This trajectory was examined through an in-depth analysis of interview transcripts.

To clarify distinctions among the categories: 1) Emotional withdrawals refer to affective states such as anxiety, irritability, and feelings of emptiness that accompany cessation from spouse, children, and parents, 2) Behavioral withdrawals encompass observable actions and coping behaviors, including restlessness, avoidance, and substance-seeking patterns, and 3) Perceptual withdrawals involve cognitive and interpretive shifts, such as changes in self-concept, perceived severity of symptoms, and meaning-making around addiction and recovery. Although some quotations reflected overlapping experiences (e.g., emotional distress expressed through behavioral manifestations), categorization was guided by the primary dimension emphasized in participants' narratives. This analytic approach ensured conceptual clarity while acknowledging the interconnected nature of these phenomena.

One salient theme extended beyond withdrawal. Participation in the MMT program was perceived as a restorative phase, particularly in its influence on familial relationships and dynamics, marking a post-withdrawal stage of reintegration.

Theme 1: Emotional withdrawals

Despite being deeply intertwined with psychological factors, emotional withdrawal surfaced as the initial and most profound impact of substance abuse on familial relationships—including those with spouses, children, and parents. A consistent narrative across participants was the experience of *emotional detachment*, often described as "no emotional attachment." This detachment marked the beginning of their substance use trajectories, as individuals gradually disengaged from family and social bonds in favor of opioid consumption.

> "The central focus of my life became abusing opium. I neglected my wife and children's needs and emotions… I felt no emotional connection to my family relationships."
> — 48-year-old participant with a 10-year history of drug abuse

> "Drugs made me withdrawn and impolite. I began to dislike crowded places—if I knew there were four or five people somewhere, I wouldn't go. I changed. I stopped greeting people and became so reserved and distant that my relationship with my sister was reduced to just exchanging greetings."
> — 34-year-old participant with a 9-year history of drug abuse

> "I felt no emotional attachment to anyone. I didn't care if I stayed away from home for ten days."
> — 41-year-old participant with a 15-year history of drug abuse.

This initial stage reflects the emotional detachment from close family members—particularly spouses, children, and parents. Participants consistently reported a lack of emotional connection, which marked the beginning of their disengagement from familial relationships. Emotional withdrawal often preceded behavioral changes and was characterized by feelings of numbness, isolation, and avoidance.

Theme 2: Behavioral withdrawals

Emotional detachment often led to observable behavioral withdrawals. In fact, the transition from emotional to behavioral withdrawal showcases the impairment of subjects' decision-making or impulse control abusing drugs. However, although many participants initially expressed a desire to quit and preserve their family life, the effects of substance abuse left them feeling incapable of doing so. All six married participants in this study reported undergoing divorce due to substance-related issues.

> "I couldn't control my behavior at home. Everyday sounds—like the vacuum or meat grinder—were unbearable. I'd shout at my wife and daughter to make it stop. If my daughter got too close, I'd push her away harshly. I refused to support them financially, and they began to distance themselves. But I felt nothing—no guilt, no shame."
> — 48-year-old participant with a 10-year history of substance abuse

> "My wife and I had constant arguments. After the fourth or fifth major dispute, she left—and we divorced. We never even discussed the possibility of separation beforehand."
> — 31-year-old participant with a 5-year history of drug abuse

> "I used drugs in secret—no one knew about my addiction. I couldn't join my wife at parties or trips; she always went alone. I missed most family holidays too—maybe three or four times they all went without me. My wife would make gentle excuses for my absence, saying I had work or something to do. But she often told me, 'I worry about you. I dream of the day you'll join me at one of these gatherings.'"
> — 38-year-old participant with six years of experience

Emotional detachment gradually manifested in observable behavioral changes. This stage includes disruptions in economic responsibilities, relational engagement, and communication patterns. Participants described increased conflict, absence from family events, financial neglect, and eventual marital breakdown. Behavioral withdrawal deepened the emotional divide and contributed to further isolation.

Theme 3: Perception of withdrawals

Participants of varying ages, durations of drug abuse, and marital statuses consistently reported feeling excluded by family members. This theme, labeled *perception of withdrawals,* reflects the emotional and relational consequences of being distanced by loved ones. Behavioral withdrawal—such as avoidance, silence, or lack of engagement—often led family members to either separate from or ignore the individual. Over time, this contributed to a deepened sense of unsupportedness, accompanied by feelings of fear, shame, and distrust.

> "Abusing different drugs dragged me toward a state of weariness and fatigue. I felt no future, no hope of returning to normal life. I perceived myself as evil, useless, or a bad person in my family's eyes."
> — 34-year-old participant with a 9-year history of drug abuse

"My parents wouldn't let me stay unless I quit using. My father told me to leave and never come back in that condition. It was humiliating—I felt ashamed, afraid, betrayed. But I did it. I lived as a homeless person."
— 40-year-old participant with a 23-year history of addiction

"My wife and her family never supported me in quitting. I desperately wished my in-laws would ask me—even once—why I was using drugs. But they never did."
— 34-year-old participant with an 11-year history of drug abuse

In the final stage, participants internalized the consequences of familial distancing. They generally reported a *reciprocal perceived lack of support*, *feelings of fear*, and *distrust* toward family members. This perception was shaped by experiences of rejection, silence, and unmet emotional needs. The cumulative effect of these perceptions often led individuals to seek treatment, marking a potential turning point in their addiction journey.

Table 1. The living concepts emerged from lived experiences of drug-abusers

Emergent themes	Cluster themes	Synthesized meaning
Emotional withdrawals	• Unmet emotional needs of children and spouse • Emotional exhaustion and burnout • Resentment toward substance use • Emotional strain within family	Family members experience neglect, exhaustion, and resentment, creating emotional burdens and strained relationships.
Behavioral withdrawals	Avoidance of family engagement • Social withdrawal from gatherings • Communication breakdown and frequent conflicts • Marital instability and separation • Financial stress impacting family life	Observable behaviors reflect withdrawal from family roles, reduced social interaction, and relational breakdown, often intensified by financial hardship.
Perceptional Withdrawals	• Discomfort in parenting role • Feelings of exclusion and abandonment • Fear of social judgment • Distrust, shame, and regret	Internalized distress and isolation arise from perceptions of abandonment, secrecy, and broken trust within family dynamics.

In addition, based on the thematic analysis of participants' narratives, a conceptual model was developed to illustrate the progressive impact of opioid-related substance abuse on family dynamics. The model consists of three interrelated stages of withdrawal, each representing a distinct but interconnected phase in the lived experience of addiction. Figure 1 represents the conceptual model of familial withdrawals in opioid addiction.
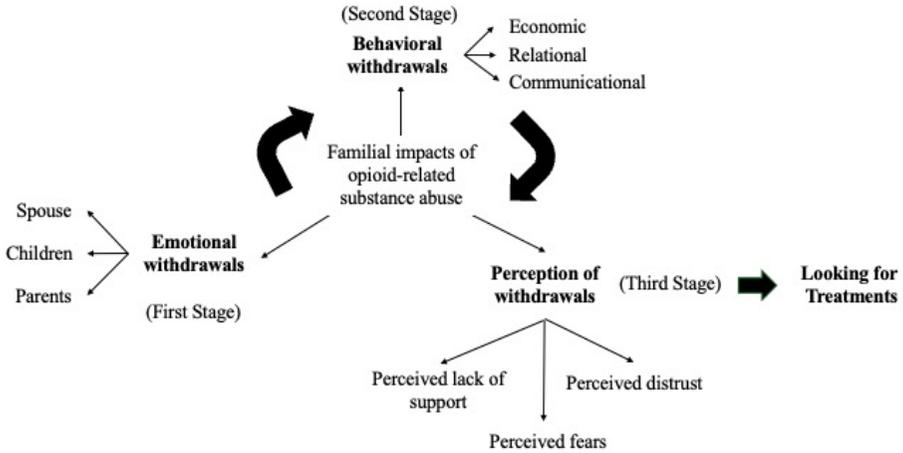
Figure 1. The flowchart model summarizing these stages and their relational progression

Theme 4: A post-withdrawal stage of reintegration

Participation in the MMT program was consistently linked to improvements in family relationships and the restoration of familial cohesion. Despite participants' concerns about certain side effects of methadone—such as reduced sexual desire—they emphasized the program's role in facilitating familial acceptance and enabling the restoration of meaningful family connections.

All participants reported that since entering the MMT program and reducing or ceasing drug use, they experienced a renewed sense of belonging within their families. The treatment contributed to improved mental health and emotional regulation, which in turn fostered healthier interactions with spouses, children, and extended family members.

A 55-year-old client with two years of MMT experience reflected:

"Since I started methadone treatment, my feelings toward my family and relatives have changed. I've rebuilt strong connections with my spouse, children, and extended family. I now attend family gatherings and social events. I feel calm and no longer respond to life's challenges with aggression. I used to be intolerant of anyone who disagreed with me, and that attitude caused many conflicts. Now, I can manage my anger and negative emotions."

Similarly, a 38-year-old participant with nine years of MMT experience shared:

"Since I began methadone, I dress appropriately and my appearance has changed. When I think about the past, I feel embarrassed and understand why people didn't trust or respect me. Now, I attend family reunions and enjoy conversations without shame. I used to avoid such events. This therapy helped me regain and preserve a positive social image."

Participants consistently described the MMT program as a turning point in their familial relationships. The emotional stability and behavioral changes brought about by methadone treatment allowed them to reconnect with loved ones and participate more fully in family life. In many cases, family members responded with renewed trust and support, reinforcing the participants' sense of rehabilitation and belonging.

> "Since joining the MMT program, I've truly returned to my family. People now see me as someone who has overcome addiction. Their attitudes have changed—they're warm and supportive when I talk about my problems. That's what I appreciate most about the program." (36-year-old participant, 2 years in treatment).

DISCUSSION

Based on the lived experiences of 13 male outpatients participating in the MMT program across three centers in Esfahan City, Iran, this study explored the familial consequences of opium-related abuse and the rehabilitative role of MMT. As shown by the results, substance abuse significantly disrupted family dynamics, often leading to emotional detachment, conflict, and breakdowns in communication. Participants reported that addiction impaired their emotional responsiveness, leading to neglect of the psychological and relational needs of family members.

Consistent with prior research (Amini et al., 2022; Daley, 2013; Klostermann & O'Farrell, 2013; Salo & Flykt, 2013), our findings highlight the adverse impact of substance abuse on family relationships. Emotional dysregulation caused by drug use often manifested in maladaptive behaviors such as aggression, withdrawal, and neglect. As Daley (2013) notes, the emotional burden placed on family members can lead to feelings of fear, shame, guilt, and depression, which in turn exacerbate relational conflicts.

Participants also reported experiencing stigma and isolation from their families after being labeled as addicts. This social rejection contributed to feelings of anger and resentment, further straining familial bonds. In collectivistic cultures such as Iran, where family honor and social image are highly valued (Shafiei et al., 2021), substance abuse can bring shame not only to the individual but also to their family. In some cases, families may withdraw support to protect their social reputation, while in others, they may attempt to reintegrate the individual to restore familial honor.

The process of stigmatization and detachment is well explained by the Stage Model of Self-Stigma (Corrigan & Rao, 2012). As individuals internalize public stigma, they begin to perceive themselves as unworthy, leading to self-hatred and distancing from family members. This cycle of devaluation and emotional withdrawal undermines the potential for healthy attachment and familial support.

However, the MMT program emerged as a critical turning point in restoring family dynamics. Participants reported that methadone treatment helped regulate their emotions, reduce aggressive behaviors, and improve their capacity for empathy and communication. These changes facilitated the rebuilding of trust and emotional closeness with family members. In many cases, families responded positively to the individual's recovery efforts, offering renewed support and acceptance.

Cultural values also played a constructive role in this process. In collectivistic societies, where family and community are central to personal identity, the desire to restore one's social image and familial relationships can serve as a powerful motivator for rehabilitation. Participants expressed a strong sense of responsibility toward their families and a desire to regain their place within the household and community.

Attachment theory (Bowlby, 2005) provides further insight into these dynamics. Substance abuse disrupts the formation and maintenance of secure attachments, but recovery through MMT can reopen pathways for emotional bonding. As Lander et al. (2013) and Carter and McGoldrick (1988) suggest, substance abuse can interfere with the developmental stages of family life, but therapeutic interventions like MMT can help restore relational stability and reduce clinical symptoms among family members.

In summary, while substance abuse severely damages family dynamics through emotional detachment, stigma, and conflict, the MMT program offers a pathway to healing and reintegration. The interplay between cultural values, emotional regulation, and familial support underscores the importance of holistic approaches to addiction treatment that prioritize family involvement and relational repair.

Implications

Findings indicate that recovery is most effective when grounded in meaningful engagement with family and community rather than focusing solely on symptom reduction (see behavioural medicine, Smyth et al., 2023). Instead of addressing emotional, behavioral, or perceptual withdrawal in isolation, MMT programs should inadvertently integrate relational and culturally sensitive activities into treatment. This includes: (1) structured family therapy and psychoeducation to rebuild trust and communication, framing recovery as a shared responsibility; (2) cooperative tasks, skill-building, and community service to foster agency and belonging, allowing emotional regulation and behavioral stability to emerge naturally; and (3) leveraging collectivistic values—such as family honor and social reintegration—as motivational drivers. Institutionalizing these strategies can transform rehabilitation into a process of relational repair and cultural reintegration, where psychological change occurs as a byproduct of engaging in meaningful, embodied activities.

Limitations

This study was limited by its exclusively male sample, as cultural stigma surrounding addiction in Iran led female patients to decline participation. As a result, gendered perspectives—particularly those of mothers, spouses, and daughters—were not captured, limiting the generalizability of findings. Additionally, the absence of longitudinal follow-up restricts insights into the long-term sustainability of family reintegration. Future research should include diverse family structures and adopt longitudinal designs to better understand recovery trajectories.

Overall, this study demonstrates how opioid addiction disrupts family dynamics through emotional detachment, conflict, and isolation, while engagement in MMT fosters emotional regulation and relational repair. In Iran's collectivistic context, restoring family bonds emerged as both a personal and social milestone. These findings position MMT not merely as a medical intervention but as a relational and cultural process, where recovery is

strengthened through family-centered and community-oriented strategies. Expanding access to such approaches can enhance long-term outcomes by embedding recovery within meaningful   social   connections.

Acknowledgment

REFERENCES

Amini, F., Vaziri, S., & Amini, Z. (2022). Experiences and perspectives of patients treated with methadone on mental health aspect of lifestyle: A qualitative study. *Iranian Journal of Psychiatry & Behavioral Sciences/Progress in Psychiatry & Behavioral Sciences*, *16*(4). https://doi.org/https://doi.org/10.5812/ijpbs-128804

Babor, T. F., Caulkins, J., Fischer, B., Foxcroft, D., Medina-Mora, M. E., Obot, I., Rehm, J., Reuter, P., Room, R., & Rossow, I. (2019). Drug policy and the public good: A summary of the second edition. *Addiction*, *114*(11), 1941-1950. https://doi.org/https://doi.org/10.1111/add.14734

Bowlby, J. (2005). *A Secure Base: Clinical Applications of Attachment Theory* (Vol. 393). Taylor & Francis.

Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., & Walker, K. (2020). Purposive sampling: complex or simple? Research case examples. *Journal of Research in Nursing*, *25*(8), 652-661. https://doi.org/https://doi.org/10.1177/1744987120927206

Carter, B. E., & McGoldrick, M. E. (1988). *The Changing Family Life Cycle: A Framework for Family Therapy*. Gardner Press.

Cascun, S. (2023). *Methadone Maintenance Treatment: A Narrative Inquiry* (Master's dissertation) [University of Malta]. Retrieved from https://www.um.edu.mt/library/oar/handle/123456789

Colaizzi, P. F. (1978). Psychological research as the phenomenologist views it. In R. S. Valle & M. King (Eds.), *Existential Phenomenological Alternatives for Psychology* (pp. 48-71). Oxford University Press.

Corrigan, P. W., & Rao, D. (2012). On the self-stigma of mental illness: Stages, disclosure, and strategies for change. *Canadian Journal of Psychiatry*, *57*(8), 464-469. https://doi.org/10.1177/070674371205700804

Daley, D. C. (2013). Family and social aspects of substance use disorders and treatment. *Journal of Food and Drug Analysis*, *21*(4), S73-S76. https://doi.org/https://doi.org/10.1016/j.jfda.2013.09.038

Falavarjani, M. F., & Yeh, C. J. (2018). A phenomenological study of adaptability, multiple identities, and acculturative strengths as an Iranian immigrant in Malaysia. *International Journal of Social Science Research*, *6*(2), 44-56. http://dx.doi.org/10.5296/ijssr.v6i2.13405

Fırıncık, S., & Gürhan, N. (2019). The effect of problem-solving ability on suicide, depression, and hopelessness in cigarette, alcohol, or substance addicts and relationships with each other. *Journal of Psychiatric Nursing*, *10*(1), 39-47. https://doi.org/10.14744/phd.2018.57689

Husserl, E. (2001). *Analyses Concerning Passive and Active Synthesis: Lectures on Transcendental Logic (A. J. Steinbeck, Trans.)*. Boston, MA: Kluwer Academic.

Joseph, H., Stancliff, S., & Langrod, J. (2000). Methadone maintenance treatment (MMT). *The Mount Sinai Journal of Medicine*, *67*(5-6), 347-364.

Klostermann, K., & O'Farrell, T. J. (2013). Treating substance abuse: Partner and family approaches. *Social Work in Public Health*, *28*(3-4), 234-247. https://doi.org/https://doi.org/10.1080/19371918.2013.759014

Lander, L., Howsare, J., & Byrne, M. (2013). The impact of substance use disorders on families and children: From theory to practice. *Social Work in Public Health*, *28*(3-4), 194-205. https://doi.org/https://doi.org/10.1080/19371918.2013.759005

Lunneblad, J. (2019). Introduction: School Violence in the Nordic Countries–A Changing Sociocultural Landscape. In J. Lunneblad (Ed.), *Policing Schools: School Violence and the Judaification of Youth* (pp. 1-15). Springer.

Nikpour, G. (2018). Drugs and drug policy in the Islamic Republic of Iran. *Middle East Brief*, 119-128, Retrieved May 2019 from https://www.brandeis.edu/crown/publications/meb/meb2119.html

O'Byrne, P., & Jeske Pearson, C. (2019). Methadone maintenance treatment as social control: Analyzing patient experiences. *Nursing Inquiry*, *26*(2), e12275. https://doi.org/10.1111/nin.12275

Piacentine, L. B. (2013). Spirituality, religiosity, depression, anxiety, and drug-use consequences during methadone maintenance therapy. *Western Journal of Nursing Research*, *35*(6), 795-814. https://doi.org/10.1177/0193945913479452

Ramirez-Castillo, D., Garcia-Roda, C., Guell, F., Fernandez-Montalvo, J., Bernacer, J., & Morón, I. (2019). Frustration tolerance and personality traits in patients with substance use disorders [Original Research]. *Frontiers in Psychiatry*, *10*(421). https://doi.org/10.3389/fpsyt.2019.00421

Salo, S., & Flykt, M. (2013). The impact of parental addiction on child development. In Suchman NE, Pajulo M, & Mayes LC (Eds.), *Parenting and Substance Abuse: Developmental Approaches to Intervention.* (pp. 195e210). Oxford University Press.

Schwartz, R. P., Kelly, S. M., Mitchell, S. G., Gryczynski, J., O'Grady, K. E., & Jaffe, J. H. (2019). Initiating methadone in jail and in the community: Patient differences and implications of methadone treatment for reducing arrests. *Journal of Substance Abuse Treatment*, *97*, 7-13. https://doi.org/10.1016/j.jsat.2018.11.006

Shafiei, F., Falavarjani, M., Yeh, C., & Ghodousi, A. (2021). Substance abuse, criminality, and social consequences: The lived experiences of male outpatients in a Methadone Maintenance Treatment Program in Iran. *Journal of Addiction and Recovery*, *4*(1), 1028-38.

Shoaa Kazemi, M., Bakteyari, A., Mohammadi, F., Mahamid, F., & Bdier, D. (2025). The lived experiences of Iranian women overcoming challenges in addiction recovery: A qualitative study. *Journal of Ethnicity in Substance Abuse*, 1-14. https://doi.org/https://doi.org/10.1080/15332640.2025.2479608

Sloboda, Z., Glantz, M. D., & Tarter, R. E. (2012). Revisiting the concepts of risk and protective factors for understanding the etiology and development of substance use and substance use disorders: Implications for prevention. *Substance Use & Misuse*, *47*(8-9), 944-962. https://doi.org/10.3109/10826084.2012.663280

Smyth, J. M., Zawadzki, M. J., & White, S. C. (2023). Behavioral medicine. In *Encyclopedia of Mental Health, Third Edition: Volume 1-3* (Vol. 1, pp. V1-195-V1-203). Elsevier. https://doi.org/10.1016/B978-0-323-91497-0.00235-6

Underhill, K., Dumont, D., & Operario, D. (2014). HIV prevention for adults with criminal justice involvement: a systematic review of HIV risk-reduction interventions in incarceration and community settings. *American Journal of Public Health*, *104*(11), e27-e53. https://doi.org/10.2105/AJPH.2014.302152

Whiston, S. C. (2012). *Principles and Applications of Assessment in Counseling*. Cengage Learning.

Yeh, C. J., & Inman, A. G. (2007). Qualitative data analysis and interpretation in counseling psychology: Strategies for best practices. *Counseling Psychologist*, *35*(3), 369-403. https://doi.org/10.1177/0011000006292596

Zhang, Y., & Wildemuth, B. M. (2009). Unstructured interviews. In B. M. Wildemuth. (Ed.), *Applications of Social Research Methods to Questions in Information and Library Science* (2 ed., pp. 222-231). Libraries Limited.

Author bio

Mehrdad Falavarjani earned his Ph.D. in Psychology and Health Studies from the University of Saskatchewan, Canada. His research focuses on psychological adjustment and cross-cultural dynamics among diverse populations, including international students, immigrants, and individuals affected by substance use. Email: fazeli.mehrdad@gmail.com