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Development and Evaluation of a Family-Centered Psychological Intervention Program on Self-Worth in Women with Substance Use Disorder

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A B S T R A C T

Objective: The present study aimed to develop and evaluate the effectiveness of a culturally adapted family-centered psychological intervention program in improving self-worth and its components among women with substance use disorders.

Methods and Materials: This research employed a mixed-methods design. In the qualitative phase, a descriptive phenomenological approach was used, and data were collected through semi-structured interviews with 10 addiction specialists and therapists in Tehran, which were analyzed using Colaizzi's thematic analysis method. The extracted themes informed the development of a 12-session family-centered psychological intervention program whose content validity was confirmed using CVR and CVI indices. In the quantitative phase, a quasi-experimental pretest–posttest design with a control group was implemented. Thirty women with substance use disorders were selected from addiction treatment centers in Tehran and randomly assigned to an experimental group (n = 15) and a control group (n = 15). The Self-Worth Scale was administered before and after the intervention. Data were analyzed using multivariate and univariate analyses of covariance in SPSS.

Findings: Multivariate analysis of covariance revealed a significant overall effect of the intervention on posttest self-worth and its components ($p < .001$). Univariate ANCOVA indicated significant improvements in total self-worth, family support, competition and achievement, physical appearance, divine love, academic competence, virtue and moral integrity, and approval from others in the experimental group compared with the control group (all $p < .01$), with large effect sizes.

Conclusion: The family-centered psychological intervention was highly effective in enhancing self-worth and multiple dimensions of psychological functioning in women with substance use disorders, highlighting the central role of family processes in addiction recovery and psychosocial rehabilitation.

Keywords: *Family-centered intervention, self-worth, women's addiction.*

1. Introduction

Substance use disorders remain a major public health and psychosocial challenge worldwide, with consequences that extend beyond the individual user to families, communities, and service systems. International monitoring reports continue to underscore the persistence and diversification of drug markets, trafficking routes, and associated harms, reinforcing the need for multi-level prevention and treatment strategies that address both clinical and contextual determinants of use and relapse (United Nations, 2023; United Nations Office on Drugs, 2019). Although epidemiological patterns differ across regions, a consistent finding is that substance-related harms are compounded when social environments are unstable, stigmatizing, or resource-poor—conditions that often characterize the lived realities of individuals attempting recovery. Within this broader landscape, women who use psychoactive substances frequently experience intersecting burdens, including heightened stigma, relational vulnerabilities, and constrained access to supportive treatment resources, which can undermine psychological rehabilitation and long-term recovery.

A growing body of research indicates that effective addiction care must move beyond a purely individual, symptom-centered approach to incorporate family systems and relational functioning as key mechanisms for change. Families are not only directly affected by substance use, but they also shape—through communication patterns, emotional climate, monitoring, and support—the contingencies that maintain or disrupt addictive behavior. Qualitative evidence from families involved in care highlights that motivations, expectations, and perceived responsibilities often converge around restoring relational stability, rebuilding trust, and creating conditions that sustain engagement with treatment, even when families themselves feel overwhelmed or uncertain (Assalin et al., 2021; Silva et al., 2023). At the same time, the burden carried by family caregivers can be substantial; depressive symptomatology and chronic stress among relatives of people dependent on alcohol and other drugs can erode the family's capacity to provide consistent, constructive support and may inadvertently contribute to conflict cycles that maintain relapse risk (Bessa et al., 2020). These findings collectively suggest that intervention models that explicitly target family functioning, caregiver strain, and relational resources may be particularly important in populations where social stigma and cumulative stressors are salient, including women in treatment for substance use disorders.

The rationale for family-centered intervention is also supported by evidence syntheses demonstrating the value of structured family and couple therapies across substance use conditions. An evidence-based update of couple and family therapy for substance use disorders indicates that, across the 2010–2019 literature, family-oriented approaches show meaningful benefits for engagement, retention, and substance-related outcomes, especially when interventions are manualized, skills-based, and tailored to relational dynamics that support change (Hogue et al., 2022). Similarly, prevention and resilience-focused family interventions have shown long-term effects on developmental adaptation, with parenting-focused programs producing enduring benefits through improvements in parenting practices, communication, and protective family processes (Sandler et al., 2015). These conclusions align with family-based prevention frameworks emphasizing that interventions are most impactful when they mobilize family strengths, enhance monitoring and support, and reduce coercive or inconsistent interaction patterns that amplify behavioral risk (Small & Huser, 2016). Collectively, this literature positions the family as both a context of risk and a critical platform for psychosocial recovery, particularly when the intervention aims extend beyond abstinence to broader psychological rehabilitation.

A central psychological target relevant to women's recovery is self-worth, a construct that reflects global evaluations of personal value and competence and is linked to emotion regulation, interpersonal functioning, and adaptive decision-making. In developmental and motivational research, self-esteem and self-worth are not only outcomes but also predictors that shape life satisfaction and psychological well-being over time (Coffey & Warren, 2020). Contemporary models emphasize that self-worth is influenced by satisfaction of basic psychological needs and by contexts that support autonomy, competence, and relatedness; for example, evidence from adolescent populations indicates that need satisfaction is strongly associated with global self-worth, suggesting that environments fostering supportive relationships and competence experiences can meaningfully elevate self-evaluation (Erdvik et al., 2020). In parallel, self-worth can be contingent and fragile when it depends excessively on external validation. Studies of social media contexts show that when self-worth relies on feedback signals (e.g., likes and comments), psychological well-being is compromised,

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underscoring the vulnerability of individuals whose sense of personal value is externally anchored rather than internally stabilized (Sabik et al., 2020). These dynamics are highly relevant to addiction recovery, where shame, stigma, interpersonal rejection, and repeated cycles of relapse can erode self-worth and intensify reliance on maladaptive coping.

From a clinical standpoint, compromised self-worth in women with substance use disorders may operate as a maintaining mechanism through several pathways. First, low self-worth may intensify negative affect and self-criticism, increasing the attractiveness of substances as short-term mood regulators. Second, diminished self-worth can reduce self-efficacy for change and weaken engagement in treatment tasks, including relapse prevention planning and help-seeking. Third, impaired self-worth can interact with relational stressors—particularly within families—to heighten conflict, mistrust, and social withdrawal, all of which can increase relapse vulnerability. Family processes are especially salient because they influence psychological security—an emergent construct capturing felt safety, acceptance, and stability in close relationships. Evidence indicates that psychological security can mediate links between family cohesion, self-esteem, and relational outcomes, suggesting that strengthening family cohesion and perceived safety can indirectly bolster self-evaluations and adaptive functioning (Namani et al., 2025). This mediational logic is consistent with clinical observations that recovery is more sustainable when individuals experience stable belonging and respect within their relational networks.

The developmental literature also reinforces the importance of triadic family relationships and their profiles in understanding early substance initiation and risk trajectories. Empirical work examining triadic family relationship profiles demonstrates that adolescents' substance-related behaviors are associated with patterns of parent–child and interparental relationships, indicating that family structure and relational quality are not peripheral variables but core influences on risk and protection (Xia et al., 2020). When these relational dynamics are disrupted—through chronic conflict, neglect, inconsistent monitoring, or emotional disengagement—substance use may emerge as a maladaptive solution to distress, identity confusion, or unmet needs. Conversely, when relational functioning is improved, the family can provide scaffolding for behavior change, consistent monitoring, and emotional support in ways that complement professional treatment.

In the addiction treatment literature, family-oriented therapy programs have been linked to meaningful relapse-related outcomes. Longitudinal evidence on youths who underwent family-oriented therapy indicates that relapse rates over multiple years can be predicted by identifiable factors, implying that structured family approaches may change relapse trajectories when key relational and behavioral risk factors are addressed directly (You et al., 2020). In applied clinical settings, combined therapeutic models integrating family therapy with other modalities have also been reported to influence outcomes among patients with substance abuse disorders, reflecting the clinical feasibility of family-inclusive approaches within broader treatment packages (Yousofi et al., 2015). More targeted designs, such as behavioral family therapy, have demonstrated effectiveness for reducing substance-use temptation among adolescents recovering from substance abuse, indicating that family-based behavioral skills and contingency management principles can directly affect proximal relapse mechanisms (Kian Arthi et al., 2022). Although these studies focus on adolescents and mixed populations, the underlying mechanisms—supportive monitoring, communication skills, reinforcement of recovery behaviors, and conflict regulation—are highly relevant to adult women as well, particularly when family members remain central in daily life and resource provision.

Nevertheless, designing effective family-centered programs requires careful attention to the specific needs and cultural context of the target group. Review evidence on the etiology and family-centered treatment of addiction underscores that addiction is shaped by an interplay of biological vulnerabilities, psychological risk factors, and family-system processes; thus, intervention models should be integrative and context-sensitive rather than one-size-fits-all (Hosseini Lou et al., 2020). In the Iranian context, where family networks often play a decisive role in health decision-making and caregiving, culturally adapted family-centered interventions may be especially impactful. At the same time, cultural scripts related to gender roles, honor, and stigma may intensify pressures on women who use substances, potentially worsening self-worth and inhibiting disclosure and treatment engagement. Accordingly, interventions that strengthen acceptance, reduce blame, and improve family communication may be essential not only for behavioral outcomes (e.g., relapse reduction) but also for psychological recovery indicators such as self-worth and psychological security.

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Intervention research further suggests that structured psychosocial skills—such as problem-solving, emotion regulation, and anger management—can improve psychological health and reduce relational conflict, which may indirectly support self-worth improvement. Evidence has shown the effectiveness of solution-focused problem-solving therapy in enhancing spiritual, cognitive, behavioral, and emotional dimensions of psychological health among individuals with addiction, indicating that cognitive-behavioral skill development can meaningfully improve psychosocial functioning in this population (Baqeri Nia et al., 2022). Related findings from educational psychology indicate that helping families and adolescents develop problem-solving and anger management skills can reduce parent–adolescent conflicts, supporting the premise that conflict reduction and constructive coping are viable targets for family-centered programs (Farnam, 2018). These intervention components plausibly intersect with self-worth processes: as family conflict declines and coping resources increase, individuals may experience improved competence, reduced shame, and greater perceived value within the family system.

The need for such interventions is further reinforced by evidence on the cognitive, emotional, and health harms associated with cannabis and other substances, particularly when use begins early or becomes frequent. A systematic review of systematic reviews has synthesized multiple domains of cannabis-related harms, emphasizing that adverse outcomes span mental health, cognitive functioning, and broader health indicators, thereby increasing the stakes of effective prevention and treatment strategies (Campeny et al., 2020). Empirical research in young adults also indicates that frequent marijuana use can impair risky decision-making, which may undermine behavioral self-regulation and heighten vulnerability to continued use despite negative consequences (Casey & Cservenka, 2020). Reviews of adolescent cannabis use highlight associations with cognition, brain health, and educational outcomes, suggesting that substance use can compromise the developmental foundations of competence and self-efficacy that contribute to stable self-worth (Lorenzetti et al., 2020). At a neurobehavioral level, adverse health effects of marijuana use have been documented in the biomedical literature, reinforcing that substance-related harm is not solely psychosocial but also physiological and neurocognitive, which may indirectly affect mood regulation and self-evaluation processes (Volkow et al., 2014). These findings underscore that psychological intervention is not merely adjunctive but central to addressing the downstream consequences of substance use, including the psychological and relational correlates that sustain relapse.

In addition to treatment, the prevention literature offers useful principles for intervention design. Overviews of systematic reviews on adolescent substance abuse interventions indicate that multi-component programs, including family-based elements, often show advantages in addressing complex, multi-determined behaviors, particularly when they target both individual skills and contextual influences (Das et al., 2016). While adult women in treatment represent a different developmental group, the broader implication is that interventions are more likely to be effective when they address multiple pathways simultaneously: cognitive–emotional processes (e.g., self-worth, shame, emotion regulation), relational processes (e.g., communication, cohesion, psychological security), and behavioral processes (e.g., relapse prevention planning, coping skills). In contemporary family research, systematic reviews have also documented that family-based interventions can improve family functioning in other health behavior domains, such as physical activity, suggesting that family functioning itself is a malleable target responsive to structured intervention strategies (Rhodes et al., 2024). This cross-domain evidence strengthens confidence in family functioning as a viable mechanism through which self-worth and recovery-related outcomes may be improved.

2. Methods and Materials

This study employed a mixed-methods design (qualitative–quantitative). The qualitative phase used a descriptive phenomenological approach, and the quantitative phase applied a quasi-experimental design with a pretest–posttest format including an experimental group and a control group. The population of the qualitative phase consisted of all specialists and therapists in the field of addiction. Sampling was conducted purposively, and interviews were carried out with 10 psychologists from universities and psychological centers in Tehran. The data collection instrument in the qualitative phase was an individual semi-structured interview. For interpretation and analysis of the qualitative data, coding and thematic analysis were conducted using the method proposed by Colaizzi (2003).

The inclusion criteria for the expert group were as follows: having at least three articles or books on therapeutic–educational interventions, a minimum of four

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years of clinical experience working with individuals who use drugs, at least four years of teaching experience, and a record of delivering at least two professional lectures on addiction intervention. The statistical population of the quantitative phase consisted of all women with substance use disorder who referred to addiction treatment centers in Tehran during 2023–2024.

In the present study, participants' self-worth was measured using the Self-Worth Scale developed by Crocker et al. (2003). This instrument contains 35 items rated on a 7-point Likert scale. The scale includes seven subscales: family support self-worth, competition and achievement, physical appearance, divine love, academic competence, virtue and moral integrity, and approval from others. Marzban, Kaveh Farsani, and Bahrami (2013) standardized the Self-Worth Questionnaire on a sample of 448 high school students in Isfahan. Construct validity was evaluated using exploratory and confirmatory factor analyses, resulting in the extraction of five factors, and the confirmatory model demonstrated satisfactory fit indices. Overall, the Persian version was found to have acceptable validity and reliability, with a Cronbach's alpha coefficient of .83. In the present study, the reliability of the questionnaire, assessed using Cronbach's alpha, was .79.

Initially, interview sessions were conducted by the researcher with addiction specialists and therapists, and the criteria and characteristics of the family-centered intervention program for women who use drugs were extracted based on expert opinions. Subsequently, through analysis of the interview transcripts and highlighting "significant statements," sentences or quotations that reflected participants' lived experiences of the phenomenon were identified; this stage is referred to as horizontalization. The researcher then developed clusters of meaning from these significant statements. Afterward, review sessions were held with scholars, experts, and faculty members, and the criteria and features of the family-centered psychological intervention program were finalized based on expert and psychotherapist feedback. Following the development of the intervention program, it was discussed and reviewed in three focus group sessions consisting of psychologists and psychological experts.

To examine the quantitative content validity of the developed model, the Content Validity Ratio (CVR) was calculated. Based on the factors extracted from the interviews, a 12-session intervention model was designed. In addition to CVR, the Content Validity Index (CVI) was computed using evaluations from a panel of psychology professors and specialists. The content validity indices were assessed using the method proposed by Waltz and Bausell (1981).

After finalizing the family-centered psychological intervention program, in the third phase of the study (quantitative phase), a sample of 30 women with substance use disorder, along with their families, was selected and randomly assigned to two equal groups: the experimental group (n = 15) and the control group (n = 15). Inclusion criteria for participants included providing written informed consent to participate in the study, not simultaneously participating in other therapeutic–educational interventions, and having used drugs for at least six months. Exclusion criteria included unwillingness to continue participation in the sessions and absence from more than one session during the study.

Both groups completed the pretest. The developed intervention program was then implemented for the experimental group, while the control group received no intervention. After two months of intervention delivery, which consisted of 12 sessions, both groups completed the posttest questionnaires. The research data were analyzed using analysis of covariance (ANCOVA) with SPSS software (Version 26).

3. Findings and Results

Initially, data collection was carried out through interviews. The researcher's objective was to penetrate the deeper cognitive layers of the interviewees and obtain authentic and in-depth information.

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Table 1

Data Analysis of Thematic Categories

Main Theme	Subtheme	Sample Codes	Sample Quotations
Family Climate	Constructive Interaction	Improved communication, dialogue, respect, creating a sense of security, safe environment	One of the specialists strongly emphasized effective dialogue among family members with the addicted individual. The specialist stated that a safe environment should be created for talking and discussing feelings, concerns, and experiences of the addicted person (Participant 6). — It is necessary for the family to create a sense of security and a safe space for dialogue so that the addicted individual feels heard and understood (Participant 2). — In family therapy, family members are taught to improve communication with the addicted member through empathetic conversations and respect (Participant 8).
Family Climate	Acceptance	Creating a sense of belonging, non-rejection, non-abandonment, accepting the problem, accepting the addicted individual	During the recovery process, it is essential for the addicted person to feel a sense of belonging to the family and not be rejected by them (Participant 3). — One of the important aspects of family therapy is accepting both the addicted individual and the existing problem, which helps the recovery process proceed without tension (Participant 1). — Some families abandon the addicted member due to social stigma, which can cause severe psychological harm; therefore, families must not abandon the addicted member (Participant 9).
Family Climate	Empathy	Affectionate speech, understanding, cooperation, attention, non-judgment, non-blame, non-reproach	The family should pay attention to the feelings and views of the addicted individual to foster empathy and a sense of belonging (Participant 2). — The family must demonstrate empathy using affectionate language and understanding when the individual expresses themselves (Participant 4). — Reproach and blame can intensify and trigger relapse in substance use (Participant 7). — It is essential that the addicted member is not blamed or judged and that family members cooperate to understand the addicted individual during recovery (Participant 1).
Family Climate	Conflict Management	Tension, conflict, frequent arguments, family disputes, chaos	The presence of conflict and tension in the family can create an unstable environment for the addicted individual, which may push them toward substance use to escape stress; therefore, it is necessary for families to avoid tension and repeated arguments and create a calm atmosphere (Participant 5). — Chaos within the family must be managed and stable communication established (Participant 7). — Families with an addicted member usually experience high levels of conflict; therefore, these conflicts must be managed (Participant 3).
Family Climate	Support	Encouragement for recovery, provision of resources, accompaniment	Families must help provide resources and meet the basic needs of the addicted individual so that they can gradually achieve self-sufficiency (Participant 10). — The importance and manner of family support for the addicted member should be explained (Participant 5). — Family accompaniment during recovery is highly effective in motivating the addicted individual (Participant 1). — The family must act as a supporter and remain alongside the addicted member (Participant 7).
Psychological	Resilience	Tolerance, self-blame, guilt, helplessness, social stigma, psychological breakdown	Many families feel self-blame, guilt, and helplessness because their child has become addicted; therefore, strengthening tolerance in these families is crucial (Participant 2). — Many families experience psychological breakdown due to social stigma; thus, interventions focusing on reducing family stressors and enhancing resilience are essential (Participant 5).
Psychological	Positive Future Orientation	Motivation, positive attitude, hope	It is important during family therapy to create motivation for supporting the addicted individual (Participant 6). — In some families, there is no hope for the addicted person's recovery, and they abandon them; therefore, it is important to foster a positive outlook on life and addiction treatment within the family (Participant 8).
Psychological	Adaptability	Adjustment, agreement, coordination, adaptation to conditions	Family members must reach agreement and compromise regarding the new circumstances (Participant 1). — Although changes may create difficulties, family members must collaborate to adapt and act in coordination for the recovery of the addicted individual (Participant 5). — During family therapy, families with an addicted member must be trained to adapt effectively to the conditions (Participant 3).
Addiction Literacy	Knowledge Acquisition	Gaining information, harms of substances, relapse factors	Some families lack sufficient knowledge about addiction and substances and may reject the addicted member (Participant 6). — During family therapy, relapse factors should be explained to the family so that they can take appropriate preventive measures (Participant 4).

From the analysis of the collected data, three main themes and nine subthemes emerged from participants' perspectives regarding family therapy in families with an addicted member, illustrating specialists' understanding of the phenomenon of addiction among women with substance use disorder.

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Table 2

Intervention Protocol Session Indices

Session Summary	CVR	CVI
Session 1: Introduction, initial assessments, treatment goals, pretests, education on drugs and their cognitive, emotional, and behavioral consequences, the importance of family in addiction and recovery	1.00	1.00
Session 2: Review of previous session; communication assessment; family therapy techniques such as active listening, nonjudgmental emotional expression, positive feedback, empathy training, cooperation, attention, and non-blame	0.80	1.00
Session 3: Review; identification of family conflicts, classification of problems, evaluation of maladaptive interaction patterns	1.00	1.00
Session 4: Review; strengthening coping skills; problem-solving training	0.60	1.00
Session 5: Review; communication skills, emotional awareness, expression of thoughts and feelings	0.80	0.90
Session 6: Review; positive reinforcement, confidence building, resource support, family accompaniment	0.80	0.90
Session 7: Review; restructuring positive attitudes and thoughts	0.60	0.80
Session 8: Review; modifying expectations, redistributing responsibilities, future-oriented visualization	0.80	0.90
Session 9: Review; modifying dysfunctional beliefs and replacing negative thoughts	0.80	0.90
Session 10: Review; tolerance skills, reducing blame, relapse prevention planning	1.00	1.00
Session 11: Review; training weekly family meetings, reinforcing safe interaction	0.60	0.80
Session 12: Review; evaluation and posttest	1.00	0.90

As shown in Table 2, all intervention sessions demonstrated acceptable validity values, indicating that the developed intervention protocol possesses satisfactory content validity.

The mean and standard deviation of the participants' age in the quantitative phase of the study for the experimental and control groups were 32.70 (SD = 9.30), respectively. The frequency and percentage for educational level were reported as follows: for high school diploma, 24 participants (80.0%); for bachelor's degree, 14 participants (16.67%); and for master's degree, 1 participant (3.33%). Table 3 presents the means and standard deviations of self-worth in the experimental and control groups at the pretest and posttest stages.

Table 3

Means and Standard Deviations of Self-Worth in the Experimental and Control Groups at Pretest and Posttest

Variables	Groups	Pretest Mean	Pretest SD	Posttest Mean	Posttest SD
Total Self-Worth Score	Experimental	100.66	5.09	117.60	5.38
	Control	99.60	5.22	100.93	5.68
Family Support	Experimental	13.66	0.89	16.26	0.96
	Control	13.33	0.92	13.53	0.89
Competition and Achievement	Experimental	14.40	0.96	17.73	1.10
	Control	14.86	1.10	15.00	1.12
Physical Appearance	Experimental	11.93	0.93	14.40	1.00
	Control	12.13	0.96	12.26	0.96
Divine Love	Experimental	16.20	1.03	18.40	1.01
	Control	16.00	1.01	16.20	1.10
Academic Competence	Experimental	14.73	1.24	17.33	1.36
	Control	14.86	1.24	14.93	1.33
Virtue and Moral Integrity	Experimental	12.73	1.06	15.06	1.04
	Control	12.60	1.04	13.06	1.12
Approval from Others	Experimental	16.00	1.15	18.40	1.39
	Control	15.80	1.08	15.93	1.24

As shown in Table 3, the means and standard deviations of self-worth and its components are reported for both the experimental and control groups at the pretest and posttest stages. The pretest and posttest means for total self-worth in the experimental and control groups were 100.66 and 99.60, and 117.60 and 100.93, respectively. The pretest and posttest means for family support were 13.66 and 13.33, and 16.26 and 13.53, respectively. For competition and achievement, the pretest and posttest means were 14.40 and 14.86, and 17.73 and 15.00, respectively. The pretest and posttest means for physical appearance were 11.93 and 12.13, and 14.40 and 12.26, respectively. The pretest and posttest means for divine love were 16.20 and 16.00, and 18.40 and 16.20, respectively. The pretest and posttest means for

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academic competence were 14.73 and 14.86, and 17.33 and 14.93, respectively. The pretest and posttest means for virtue and moral integrity were 12.73 and 12.60, and 15.06 and 13.06, respectively. The pretest and posttest means for approval from others were 16.00 and 15.80, and 18.40 and 15.93, respectively.

Prior to data analysis, Levene's test was conducted to examine the homogeneity of variances. The results of Levene's test indicated that the significance levels for self-worth and its components were greater than .05, confirming the assumption of homogeneity of variances ($p > .05$) and supporting the use of analysis of covariance (ANCOVA). This indicates that the experimental and control groups were homogeneous with respect to variances prior to the intervention. In addition, the results of the Kolmogorov–Smirnov test for normality showed non-significant values for both the experimental and control groups, confirming the assumption of normal distribution of the variables. Table 4 presents the results of the multivariate analysis of covariance for posttest self-worth scores.

Table 4

Results of Multivariate Analysis of Covariance on Posttest Self-Worth Scores

Test	Value	F	Hypothesis df	Error df	Sig.	Effect Size
Pillai's Trace	0.807	8.979	7	15	.001	0.807
Wilks' Lambda	0.193	8.979	7	15	.001	0.807
Hotelling's Trace	4.190	8.979	7	15	.001	0.807
Roy's Largest Root	4.190	8.979	7	15	.001	0.807

As shown in Table 4, the multivariate ANCOVA results indicate that the experimental and control groups differed significantly on at least one of the dependent variables.

Table 5

Results of Univariate Analysis of Covariance on Posttest Self-Worth Scores

Source	Variable	SS	df	MS	F	Sig.	Effect Size	Power
Group	Total Self-Worth	1767.031	1	1767.031	61.122	.001	0.694	1.00
Error		780.563	27					
Group	Family Support	43.579	1	43.579	25.895	.001	0.490	0.998
Error		45.438	27					
Group	Competition and Achievement	34.538	1	34.538	18.186	.001	0.402	0.984
Error		51.277	27					
Group	Physical Appearance	40.712	1	40.712	26.548	.001	0.496	0.999
Error		41.405	27					
Group	Divine Love	30.056	1	30.056	17.366	.001	0.391	0.980
Error		46.729	27					
Group	Academic Competence	48.391	1	48.391	32.093	.001	0.543	1.00
Error		40.712	27					
Group	Virtue and Moral Integrity	26.205	1	26.205	15.099	.001	0.359	0.963
Error		46.859	27					
Group	Approval from Others	37.468	1	37.468	29.115	.001	0.519	0.999
Error		34.746	27					

As shown in Table 5, the F values obtained from the univariate ANCOVA were statistically significant for total self-worth ($F = 61.122$, $p < .01$), family support ($F = 25.895$, $p < .01$), competition and achievement ($F = 18.186$, $p < .01$), physical appearance ($F = 26.548$, $p < .01$), divine love ($F = 17.366$, $p < .01$), academic competence ($F = 32.093$, $p < .01$), virtue and moral integrity ($F = 15.099$, $p < .01$), and approval from others ($F = 29.115$, $p < .01$). These findings indicate that significant differences were observed between the experimental and control groups at posttest on all components of self-worth, demonstrating the effectiveness of the developed intervention program in enhancing self-worth.

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4. Discussion

The findings of the present study provide strong empirical support for the effectiveness of the developed family-centered psychological intervention program in enhancing overall self-worth and all of its components among women with substance use disorders. The significant posttest differences between the experimental and control groups on total self-worth, family support, competition and achievement, physical appearance, divine love, academic competence, virtue and moral integrity, and approval from others demonstrate that the intervention not only improved global self-evaluation but also produced meaningful change across multiple psychological and relational domains. These results are highly consistent with contemporary family-systems models of addiction treatment, which emphasize that sustainable recovery requires modification of both individual cognitive-emotional processes and the relational environment in which the individual is embedded (Hogue et al., 2022; Hosseini Lou et al., 2020). The magnitude of the observed effects is particularly noteworthy given the well-documented vulnerability of women with substance use disorders to persistent shame, stigma, and relational instability, all of which undermine self-worth and contribute to relapse risk (Bessa et al., 2020; Silva et al., 2023).

The improvement in total self-worth observed in the experimental group aligns closely with theoretical perspectives that conceptualize self-worth as a dynamic construct shaped by satisfaction of psychological needs for autonomy, competence, and relatedness (Erdvik et al., 2020). The intervention's emphasis on communication skills, emotional expression, acceptance, and constructive conflict management likely enhanced perceived relatedness and competence within the family context, thereby strengthening self-evaluative processes. This interpretation is supported by evidence that self-worth is strongly associated with long-term well-being and life satisfaction when supported by positive emotional and relational experiences (Coffey & Warren, 2020). Furthermore, by targeting maladaptive family interaction patterns and promoting empathy and non-judgmental support, the program appears to have directly counteracted the conditional nature of self-worth that often characterizes individuals who rely on external validation for psychological stability (Sabik et al., 2020). For women struggling with addiction, whose self-perceptions are frequently destabilized by repeated experiences of rejection and failure, the establishment of a stable and accepting relational environment is a powerful corrective influence.

The significant improvement in the family support component of self-worth represents one of the most clinically meaningful outcomes of the intervention. Prior research has demonstrated that families' motivations, expectations, and emotional responses are central determinants of treatment engagement and recovery trajectories (Assalin et al., 2021; Silva et al., 2023). The present findings extend this literature by showing that structured training in supportive behaviors—such as active listening, emotional validation, and consistent encouragement—can translate into measurable improvements in the self-evaluative systems of women in recovery. This outcome is particularly important in light of research indicating that family caregiver burden and depressive symptomatology frequently compromise the family's ability to provide effective support (Bessa et al., 2020). By equipping families with practical skills and reframing their role as active agents of change, the intervention appears to have reduced relational strain and enhanced the psychological resources available to the recovering individual.

Improvements in the competition and achievement component of self-worth further underscore the intervention's impact on motivational and competence-related processes. Substance use disorders are often associated with impairments in goal-directed behavior and decision-making, particularly in individuals with histories of frequent cannabis or substance use (Casey & Cservenka, 2020; Lorenzetti et al., 2020). By strengthening problem-solving skills, encouraging adaptive coping, and fostering confidence through family reinforcement, the intervention may have restored a sense of personal efficacy and achievement orientation. This interpretation is supported by evidence that solution-focused and problem-solving therapies significantly enhance cognitive, emotional, and behavioral dimensions of psychological health in individuals with addiction (Baqeri Nia et al., 2022). Moreover, improvements in achievement-related self-worth are likely to reduce relapse vulnerability by increasing engagement in purposeful activities and reinforcing non-substance-based sources of reward.

The enhancement of physical appearance self-worth is also of substantial clinical relevance, particularly for women, whose self-concept is often strongly influenced by body image and perceived attractiveness. Substance use and its associated lifestyle disruptions frequently erode physical

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self-care and self-perception, reinforcing cycles of shame and withdrawal. The intervention's focus on acceptance, respect, and positive feedback within the family context likely counteracted negative self-schemas and facilitated reconstruction of healthier body-related self-evaluations. This outcome resonates with broader evidence that improvements in relational functioning and psychological security can mediate the relationship between self-esteem and overall well-being (Namani et al., 2025).

Similarly, the observed gains in divine love, virtue, and moral integrity reflect the program's capacity to restore deeper existential and value-based dimensions of self-worth. Many women with substance use disorders experience profound moral injury, guilt, and spiritual disconnection, which intensify self-criticism and hopelessness. By integrating supportive dialogue, acceptance, and future-oriented meaning-making, the intervention appears to have facilitated reconciliation between personal values and self-perception. These changes are consistent with resilience-focused family interventions that emphasize meaning, hope, and adaptive identity reconstruction as central mechanisms of recovery (Sandler et al., 2015).

The improvement in academic competence self-worth may be interpreted as an indirect effect of enhanced cognitive functioning and self-regulatory capacity. Substance use, particularly cannabis and other psychoactive substances, has been associated with deficits in cognition and executive functioning that undermine educational and occupational performance (Campeny et al., 2020; Lorenzetti et al., 2020; Volkow et al., 2014). The intervention's emphasis on problem-solving, planning, and self-efficacy—reinforced by family involvement—likely strengthened participants' confidence in their intellectual and learning capacities, which is essential for long-term social reintegration and vocational success.

Finally, the significant increase in approval-from-others self-worth highlights the central role of relational validation in psychological recovery. Although excessive dependence on external approval can be maladaptive, for individuals emerging from prolonged stigma and rejection, the experience of being valued and accepted by close others is a necessary precursor to internalized self-respect (Sabik et al., 2020). The intervention's structured focus on empathy, non-judgment, and constructive communication created a relational climate in which women could experience consistent social affirmation without the volatility that typically accompanies substance-using environments. This finding is congruent with research showing that family cohesion and satisfaction act as buffers against modern psychosocial risks and contribute to improved self-esteem and life satisfaction (Przepiórka et al., 2025; Rojas et al., 2023).

5. Conclusion

Collectively, these findings offer robust support for the theoretical proposition that family-centered interventions constitute a powerful mechanism for improving psychological recovery outcomes in women with substance use disorders. The present results extend previous work on family-oriented therapies and relapse prevention (Kian Arthi et al., 2022; You et al., 2020; Yousofi et al., 2015) by demonstrating that such interventions also produce broad and durable changes in core self-evaluative processes. By simultaneously targeting individual cognition, emotional regulation, and family interaction patterns, the intervention achieved a level of impact that is consistent with multi-component models of addiction treatment recommended in the prevention and intervention literature (Das et al., 2016; Small & Huser, 2016).

6. Limitations & Suggestions

Despite the promising findings, the study is subject to several limitations. The sample size was relatively small and drawn from a limited geographical area, which restricts the generalizability of the results. The reliance on self-report measures may have introduced response bias. The absence of long-term follow-up prevents conclusions about the durability of the observed effects. Additionally, the study did not examine potential moderating variables such as trauma history, psychiatric comorbidity, or socioeconomic status, which may influence treatment responsiveness.

Future studies should employ larger, more diverse samples across multiple regions and include longitudinal follow-up assessments to examine maintenance of treatment gains. Incorporating objective behavioral indicators of relapse and psychosocial functioning would strengthen causal inference. Research should also explore differential effects of the intervention across subgroups of women, including those with co-occurring mental health disorders or varying levels of family cohesion, to refine tailoring of intervention components.

Addiction treatment centers should consider integrating structured family-centered psychological programs as standard components of women's recovery services. Clinicians should receive specialized training in family-

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systems approaches and in addressing self-worth restoration as a core therapeutic target. Policies should support active family participation in treatment planning, and community programs should promote public education aimed at reducing stigma and strengthening supportive family environments for women in recovery.

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Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

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Authors' Contributions

All authors have contributed significantly to the research process and the development of the manuscript.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

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References

Assalin, A. C. B., Zerbetto, S. R., Ruiz, B. O., Cugler, P. S., & Pereira, S. S. (2021). Facilities of family adherence in treatment of chemical dependence: families' perception. *Rev Eletrônica Saúde Mental Álcool Drog*, *17*(1), 17-25. https://doi.org/10.11606/issn.1806-6976.smad.2021.150251

Baqeri Nia, E., Safara, M., Karami, A., & Makoundeh Hosseini, S. (2022). Determining the effectiveness of problem-solving therapy (solution-focused) on the spiritual, cognitive, behavioral, and emotional dimensions of psychological health in addicts. *Research in Religion and Health*, *8*(2), 140-149. https://ensani.ir/fa/article/509225/

Bessa, F. B., Bandeira, M., Pollo, T. C., & Oliveira, D. C. R. (2020). Sobrecarga e sintomatologia depressiva em familiares cuidadores de pessoas dependentes de álcool e outras drogas. *Gerais Rev Interinst Psicol*, *13*(2). https://doi.org/10.36298/gerais202013e14705

Campeny, E., López-Pelayo, H., Nutt, D., Blithikioti, C., Oliveras, C., Nuño, L., Maldonado, R., Florez, G., Arias, F., Fernández-Artamendi, S., Villalbí, J. R., Sellarès, J., Ballbè, M., Rehm, J., Balcells-Olivero, M. M., & Gual, A. (2020). The blind men and the elephant: Systematic review of systematic reviews of cannabis use related health harms. *Eur Neuropsychopharmacol*, *33*, 1-35. https://doi.org/10.1016/j.euroneuro.2020.02.003

Casey, J. L., & Cservenka, A. (2020). Effects of frequent marijuana use on risky decision-making in young adult college students. *Addict Behav Rep*, *11*, 100253. https://doi.org/10.1016/j.abrep.2020.100253

Coffey, J. K., & Warren, M. T. (2020). Comparing adolescent positive affect and self-esteem as precursors to adult self-esteem and life satisfaction. *Motivation and Emotion*, *44*(5), 707-718. https://doi.org/10.1007/s11031-020-09825-7

Das, J. K., Salam, R. A., Arshad, A., Finkelstein, Y., & Bhutta, Z. A. (2016). Interventions for adolescent substance abuse: An overview of systematic reviews. *Journal of Adolescent Health*, *59*(4), S61-S75. https://doi.org/10.1016/j.jadohealth.2016.06.021

Erdvik, I. B., Haugen, T., Ivarsson, A., & Säfvenbom, R. (2020). Global self-worth among adolescents: The role of basic psychological need satisfaction in physical education. *Scandinavian Journal of Educational Research*, *64*(5), 768-781. https://doi.org/10.1080/00313831.2019.1600578

Farnam, A. (2018). Effectiveness of problem solving and anger management on decrease of parent-adolescent conflicts

AFTJ Applied Family Therapy Journal
E-ISSN: 3041-8798

among boy students. *J Educ Psychol*, *15*(29), 149-176. https://doi.org/10.22111/JEPS.2018.3605

Hogue, A., Schumm, J. A., MacLean, A., & Bobek, M. (2022). Couple and family therapy for substance use disorders: Evidence-based update 2010-2019. *Journal of marital and family therapy*, *48*(1), 178-203. https://doi.org/10.1111/jmft.12546

Hosseini Lou, A., Rostami, R., & Khorshidi Sa, A. (2020). The etiology and family-centered treatment of addiction: A review study. *Scientific Journal of Psychology Emergence*, *9*(11), 149-158. https://frooyesh.ir/browse.php?a_id=2373&slc_lang=fa&sid=1&printcase=1&hbnr=1&hmb=1

Kian Arthi, S., Abbas Pour, Z., & Aslani, K. (2022). The effectiveness of behavioral family therapy on substance use temptation in adolescents recovering from substance abuse. *Scientific Quarterly Journal of Addiction Research*, *16*(64), 61-80. https://doi.org/10.52547/etiadpajohi.16.64.61

Lorenzetti, V., Hoch, E., & Hall, W. (2020). Adolescent cannabis use, cognition, brain health and educational outcomes: A review of the evidence. *Eur Neuropsychopharmacol*, *36*, 169-180. https://doi.org/10.1016/j.euroneuro.2020.03.012

Namani, E., Mohammadi Hosseini, S. A., Namani, R., & Arzandehfar, A. (2025). Investigating the mediating role of psychological security in the relationship between family cohesion and self-esteem with marital satisfaction among female teachers. *Journal of Applied Psychological Research*, *16*(1), 199-221. https://doi.org/10.22059/japr.2023.348899.644385

Przepiórka, A., Błachnio, A., Kot, P., & Cudo, A. (2025). Family Satisfaction That Matters. The Relationship Between Problematic Instagram Use, Self-Esteem and Life Satisfaction. *Interciencia*. https://doi.org/10.59671/h3j5f

Rhodes, R. E., Hollman, H., & Sui, W. (2024). Family-based physical activity interventions and family functioning: A systematic review. *Family Process*, *63*(1), 392-413. https://doi.org/10.1111/famp.12921

Rojas, L. M., Brincks, A., Brown, E. C., Bahamon, M., Estrada, Y., Lee, T. K., & Pantin, H. (2023). Family Functioning in Hispanic Parents of Adolescents: Who Benefits Most from a Family-Based HIV and Substance Use Preventive Intervention? *Prevention Science*, *24*(2), 249-258. https://doi.org/10.1007/s11121-022-01489-8

Sabik, N. J., Falat, J., & Magagnos, J. (2020). When self-worth depends on social media feedback: Associations with psychological well-being. *Sex Roles*, *82*, 411-421. https://doi.org/10.1007/s11199-019-01062-8

Sandler, I., Ingram, A., Wolchik, S., Tein, J. Y., & Winslow, E. (2015). Long-term effects of parenting-focused preventive interventions to promote resilience of children and adolescents. *Child Development Perspectives*, *9*(3), 164-171. https://doi.org/10.1111/cdep.12126

Silva, F. M. D., Camatta, M. W., Lachini, A. J. B., & Nasi, C. (2023). Family motivations and expectations in the care for psychoactive substance users. *Revista Gaúcha De Enfermagem*, *44*, e20220141. https://doi.org/10.1590/1983-1447.2023.20220141.en

Small, S., & Huser, M. (2016). *Family-Based Prevention Programs*. Switzerland: Springer International Publishing. https://doi.org/10.1007/978-3-319-32132-5_161-2

United Nations. (2023). *Haiti's criminal markets: mapping trends in firearms and drug trafficking*. https://www.unodc.org/documents/data-and-analysis/toc/Haiti_assessment_UNODC.pdf

United Nations Office on Drugs, C. (2019). *Annual Report 2019: together making the region safer from drugs, crime and terrorism*. https://www.unodc.org/roca/uploads/documents/ROCA_Annual_Reports/ROCA_AR_2019_EN_web.pdf

Volkow, N. D., Baler, R. D., Compton, W. M., & Weiss, S. R. (2014). *Adverse health effects of marijuana use*.

Xia, M., Weymouth, B. B., Bray, B. C., & et al. (2020). Exploring Triadic Family Relationship Profiles and Their Implications for Adolescents' Early Substance Initiation. *Prev Sci*, *21*, 519-529. https://doi.org/10.1007/s11121-019-01081-7

You, Y. H., Lu, S. F., Tsai, C. P., & et al. (2020). Predictors of five-year relapse rates of youths with substance abuse who underwent a family-oriented therapy program. *Ann Gen Psychiatry*, *19*, 17. https://doi.org/10.1186/s12991-020-00269-4

Yousofi, F., Arazadeh, M., & Nazemi, B. (2015). The impact of combined therapy-family therapy, group therapy, and methadone therapy-on patients with substance abuse disorders. *Family Counseling and Psychotherapy*, *5*(1), 24-41. https://fcp.uok.ac.ir/mobile/article_11239.html

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