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Model for Explaining Attitude Towards Addiction in Clients Undergoing Withdrawal Based on Emotion Regulation Strategies and Attachment Styles with the Mediating Role of Ego Strength

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A B S T R A C T

Objective: The present study aimed to determine a model for explaining the attitude towards addiction in clients undergoing withdrawal, based on emotion regulation strategies and attachment styles with the mediating role of ego strength.

Methods and Materials: The methodology of this study was descriptive-correlational, relying on structural equation modeling. The statistical population included all addicts undergoing withdrawal who visited addiction cessation centers in District 1 of Tehran, from whom a sample of 214 individuals was selected using cluster random sampling (n=214). The data collection tools were the Markstrom et al. (1997) Ego Strength Psychosocial Inventory, Nazari's (2000) Attitude Towards Addiction Questionnaire, Gross and John's (2003) Emotion Regulation Strategies Questionnaire, and Hazan and Shaver's (1987) Adult Attachment Questionnaire.

Findings: Data analysis using structural equation modeling indicated that, given the lesser effect of the direct path compared to the indirect paths, the presence of the mediating variable ego strength enhances the effect, and the mediating role of ego strength in the current hypothesis was confirmed.

Conclusion: Therefore, there is a relationship between attachment styles and emotion regulation strategies with the attitude towards addiction in clients undergoing withdrawal, mediated by ego strength. Recognizing the factors influencing a positive attitude towards substance abuse and its consequences is one of the first and most important actions in preventive programs against substance abuse. Practical suggestions were offered based on the interrelationships of the research variables.

Keywords: *Ego Strength, Emotion regulation Strategies, Attachment Styles, Attitude Towards Addiction.*

1. Introduction

O

ne of the major and fundamental problems in the contemporary world is drug addiction, defined as a maladaptive pattern of substance use leading to significant clinical distress, characterized by symptoms such as tolerance, withdrawal, and craving. Despite its physiological, psychological, and social consequences, the individual continues to use the substance (American Psychiatric Association, 2022). Addiction imposes a heavy cost on both the individual and society and is recognized as one of the main factors associated with mortality (Kendler et al., 2017).

Studies indicate that the process of addiction can be influenced by individuals' beliefs and attitudes (Friis et al., 2017). Beliefs related to substances are categorized as a set of convictions focused on pleasure-seeking, problem-solving, relief, and escape. Therefore, individuals experiencing negative emotions like anxiety and depression may have expectations that substance use will alleviate worry and tension caused by anxiety (Mohammadkhani et al., 2011). By altering individuals' positive attitudes and strengthening their negative attitudes towards substances, one can prevent the inclination towards substance abuse and its continuity (Campbell et al., 2019). The role of a positive attitude towards drugs is so significant that it can be said that it is the thinking and attitude of addicted individuals that either leads them to relapse or keeps them away from substance use permanently (Gholizadeh & Manzari, 2019).

Research backgrounds suggest that attachment styles are among the factors that can play a role in forming attitudes related to addiction (Rahmani et al., 2019). According to psychoanalytic and behavioral theories, the inner feelings of affection and security that result from a healthy attachment relationship contribute to all aspects of psychological development (Ravitz et al., 2010). It is believed that the quality of insecure attachment in adults significantly shapes based on adverse early caregiving experiences (Simard et al., 2011). In classic attachment theory, securely attached adults are those who have a positive view of themselves and others, are committed in their interactions, and feel comfortable in intimate relationships (Mikulincer & Shaver, 2019). Adults with ambivalent insecure attachment are characterized by emotional imbalance and more conflicts (Kelly, 2018). These individuals struggle between their strong need for close and intimate relationships and their insecurity about others' responsiveness to their needs and the possibility of being rejected. They also tend to have a less positive view of themselves (Nakhoul et al., 2020; Rahmani et al., 2019). Adults with avoidant insecure attachment feature fear of closeness and intimacy, preferring autonomy over emotional proximity (Jiao, 2022; Kelly, 2018). They see themselves as self-sufficient, deny vulnerability, and claim no need for close relationships, showing a tendency to avoid intimacy (Johnson, 2022). Research backgrounds, including the study by Hamednia et al. (2017), indicate that anxious and avoidant attachments have a significant positive relationship with attitude towards substances and readiness for addiction (Hamednia et al., 2017). Rahmani et al. (2019) showed that ambivalent insecure attachment increases the tendency towards addiction (Rahmani et al., 2019). Nakhoul et al. (2020) identified secure attachment as a protective and reducing factor in addiction to alcohol, cigarettes, and hookah (Nakhoul et al., 2020).

On the other hand, insecure and anxious attachments are more often seen as a sign of emotion regulation problems, associated with less life satisfaction, greater stress perception, and more negative emotions; while more avoidant attachment is associated with negative emotions (Mikulincer & Shaver, 2019; Shlomo et al., 2019). Emotion regulation leads to the ability to understand emotions, modulate emotional experience, and express emotions, encompassing coping strategies used by individuals when faced with intense emotions (Towsyfyan et al., 2021). Emotion regulation strategies may allow emotionally vulnerable individuals to be present in time and space, thus achieving a more objective understanding of threat levels instead of reacting excessively and anxiously to situations (Gross & John, 2003). Chen and Singhal (2015) demonstrated that emotions shift attention towards emotional stimuli, resulting in reduced concentration and impaired processing of these stimuli. Adaptive emotion regulation is associated with self-esteem and positive social interactions (Chan & Singhal, 2015). Increasing positive emotional experiences enables effective action in stressful situations and the use of appropriate strategies. Emotion regulation strategies have been linked to psychological distress (Garnefski & Kraaij, 2006). Reappraisal as an emotion regulation strategy is associated with higher well-being and mental health. Moreover, difficulty in emotion regulation can significantly affect risky behaviors (Garnefski et al., 2009; Garnefski & Kraaij, 2006).

Another influential factor in the emergence, severity, continuity, and treatment of substance use disorders is ego strength. Ego strength refers to a blend of inner-psychic capabilities displayed by individuals in their interactions with others and their social environment; it represents the individual's ability to establish a stable and effective balance

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between internal impulses and external reality (Markstrom et al., 1997). Ego strength plays a crucial role in predicting mental health (Settineri et al., 2012) and is a primary factor in the sense of self-identity, experiencing self and the world, integrating experiences and perspectives, and perceiving reality (Frederick, 2013). In general, ego strength is a factor whose strength or weakness in an individual can predict their susceptibility to opioid addiction in the face of anxiety or environmental challenges. On the other hand, ego weakness and delayed psychological maturity are significant factors in the treatment process of individuals dependent on opioids (Abramoff et al., 2015). Individuals with high ego strength do not find it difficult to say "no" to others and value themselves (Singh & Anand, 2015); this may indicate that ego strength can facilitate or lead to avoidance of substance use. The research showed a significant negative relationship between ego strength and inclination towards drug abuse (Hagger et al., 2010). Researchers have also shown the relationship between attachment style and ego strength, indicating that secure attachment style leads to high ego capacity and strength (Gresham & Gullone, 2012; Mansouri & Besharat, 2019; Shanmugam et al., 2012). A positive attitude towards substances is a significant factor in engaging in drug-seeking behaviors, the occurrence of dependency, and the continuity of substance abuse (Boogar et al., 2015; Campbell et al., 2019). Given the discussion and the lack of research examining the predictive factors of attitude towards substance use and the importance of this issue in prevention and treatment of addiction based on underlying approaches related to predictive variables of attitude towards drug use, the present study addresses whether ego strength plays a mediating role in the relationship between emotion regulation strategies and attachment styles with attitude towards addiction in clients undergoing withdrawal at addiction cessation centers in District 1 of Tehran.

2. Methods and Materials

2.1. Study Design and Participants

The method of this study was descriptive-correlational, relying on structural equation modeling. The statistical population included all addicts undergoing withdrawal treatment at addiction cessation centers in District 1 of Tehran from June to September 2020. The inclusion criteria for the study were an age range of 18-50 years, a minimum literacy level of reading and writing, undergoing addiction treatment with methadone, and consent to participate in the study. The exclusion criteria considered were a history of mental illness, chronic physical illness other than addiction, substance use duration under one year, and undergoing psychological treatments in the past 6 months and during the study.

The researcher introduced themselves to the centers and coordinated with the technical managers for data collection. Initially, from the addicts visiting the centers during a 4-month period, a list was prepared based on the inclusion and exclusion criteria. After identifying eligible individuals and obtaining their informed consent, data collection was carried out using written questionnaires. All questionnaires were anonymous, and participants were assured that their information would remain confidential and be used solely for research purposes. The sampling method was cluster random sampling, and the sample size was determined based on Kline's (2023) recommendation that in structural equation modeling, the number of samples should be 10 to 20 for each variable, with a minimum sample size of 200 (Kline, 2023). The initial estimate of the sample size, considering all 15 indices of the current study model, was calculated as 225 individuals. After excluding 11 questionnaires due to damage, data from 214 samples (n=214) were analyzed statistically. The data collection tools in this study were as follows:

2.2. Measures

2.2.1. Attachment Styles

Developed by Hazan and Shaver (1987), this questionnaire is based on the premise that similarities of child-caregiver attachment styles can be found in adulthood. It consists of 15 items measuring three types of attachment styles: avoidant insecure (items 2, 5, 8, 11, 14), ambivalent insecure or anxious (items 3, 6, 9, 12, 15), and secure (items 1, 4, 7, 10, 13). Scoring is on a 5-point Likert scale from very low=1 to very high=5. There is no total score; the minimum and maximum scores for all sub-scales are 5 and 25, respectively (Hazan & Shaver, 1994). The test's reliability was obtained through a test-retest Pearson correlation coefficient of 0.40 (Baldwin, 1995).

2.2.2. Ego Strength

This 32-item inventory, developed by Markstrom et al. (1997), measures Ego strength and includes 8 points of Ego strength: hope (items 14, 21, 24, 29), will (12, 15, 17, 31), purpose (1, 9, 16, 22), competence (5, 6, 19, 32), fidelity (11,

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13, 23, 30), love (3, 7, 20, 26), care (4, 10, 18, 28), and wisdom (2, 8, 25, 27). It is scored on a Likert scale from 1 (strongly disagree) to 5 (strongly agree). Additionally, items 1, 5, 7, 9, 14, 15, 17, 18, 20, 22, 23, 25, 26, 28, 29 are scored inversely. This questionnaire has a total score, with a minimum and maximum score of 32 and 160, respectively, and a cutoff score of 96. Markstrom and colleagues (1997) examined its validity and reliability, confirming its face, content, and construct validity and reported its Cronbach's alpha coefficient as 0.68 (Markstrom et al., 1997). The Cronbach's alpha for this inventory on an Iranian sample was 0.91, and the split-half reliability of the scale was reported as 0.77 (Einy & Narimani, 2019).

2.2.3. *Attitude Towards Addiction*

This 35-item questionnaire uses a 5-point Likert scale ranging from strongly disagree=1 to strongly agree=5. The scoring method assesses the component of positive attitude towards addiction (items 1, 3, 6, 8, 10, 13, 16, 23, 28, 30, 31, 32, 33, 34) and is inversely scored for the component of negative attitude towards addiction (items 2, 4, 5, 7, 9, 11, 12, 14, 15, 17, 18, 19, 20, 21, 22, 24, 25, 26, 27, 29, 35). The minimum and maximum scores for the positive attitude component are 14 and 70, and for the negative attitude component, they are 21 and 105, respectively. This questionnaire does not have a total score. Its face and content validity, as well as parallel-form reliability and internal consistency, have been reported as satisfactory. Its internal consistency, calculated using Cronbach's alpha coefficient, was 0.89, which is acceptable according to psychometric standards (Boogar et al., 2015; Gholizadeh & Manzari, 2019; Jazayeri et al., 2003).

2.2.4. *Emotion Regulation*

Developed by Gross and John (2003), this scale consists of 10 items with two subscales: reappraisal (items 1, 3, 5, 7, 10) and suppression (items 2, 4, 6, 8, 9). Responses are based on a 7-point Likert scale from strongly disagree (1) to strongly agree (7). This questionnaire does not have a total score, and the minimum and maximum scores for each subscale are 1 and 7, respectively. Cronbach's alpha coefficients for reappraisal and suppression were reported as 0.79 and 0.73, respectively. The test-retest reliability over three months for the entire scale was reported as 0.69. The internal consistency coefficient for reappraisal ranged from 0.48 to 0.68, and for suppression, it ranged from 0.42 to 0.63 (Gross & John, 2003; Gross & John, 2012).

2.3. *Data analysis*

Data analysis was conducted using Pearson correlation and structural equation modeling methods.

3. Findings and Results

The descriptive findings indicated that among the 214 addicts who visited the addiction cessation centers in District 1 of Tehran from June to September 2020, the age distribution of participants was as follows: 30.84% were between 18 to 30 years, 42.52% between 31 to 40 years, and 26.64% between 41 to 50 years. Regarding gender, 24.77% were female and 75.23% were male. In terms of marital status, 43.46% were single, 23.83% were married, and 32.71% were divorced. Concerning employment status, 28.97% were employed, and 71.03% were unemployed. In terms of educational level, 24.30% had below diploma, 45.23% had a diploma, 19.63% had a bachelor's degree, and 10.74% had a master's degree or higher. Regarding the duration of substance use, 11.21% used substances for 1 to 2 years, 19.16% for 3 to 4 years, 40.19% for 5 to 6 years, and 29.44% for more than 6 years. Additionally, 73.83% had a history of treatment with methadone, while 26.17% had not experienced methadone treatment before. Table 1 presents the mean and standard deviation of the research variables.

Table 1

Descriptive Statistics of Research Variables

Variable	Mean	Standard Deviation
Ego strength	125.23	2.44
Secure Attachment Style	10.97	4.08
Avoidant Insecure Attachment Style	11.03	2.46
Anxious Insecure Attachment Style	11.21	2.37
Positive Attitude Towards Addiction	42.13	6.39
Negative Attitude Towards Addiction	33.95	6.84
Reappraisal (Emotion Regulation Strategy)	19.73	3.87
Suppression (Emotion Regulation Strategy)	19.44	3.74

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Descriptive statistics, including mean and standard deviation of research variables (Ego strength, secure attachment style, avoidant insecure attachment style, anxious insecure attachment style, positive and negative attitude towards addiction, reappraisal, suppression), are provided in Table 1

The final structural equation model was used to measure the model explaining the attitude towards addiction in clients undergoing withdrawal based on emotion regulation strategies and attachment styles with the mediating role of Ego strength. The hypothetical model is presented in Figure 1 and Figure 2, drawn using output from the LISREL software.

In examining the goodness of fit of the model, the fit indices were obtained as follows: for Chi-square (p=0.001, NPAR=69) and (CMIN=532.732), Tucker-Lewis Index (TLI=0.94), Comparative Fit Index (CFI=0.95), and Bentler-Bonett Normed Fit Index (NFI=0.96). Additionally, the Normed Fit Index (PNFI) was 0.578, and the Root Mean Square Error of Approximation (RMSEA) was 0.017. Despite the statistical significance of the Chi-square statistic, these values indicate that the resulting model had an appropriate fit with the data Table 2. shows the regression coefficients for the resulting model.

Figure 1

Final Model with Direct Effects

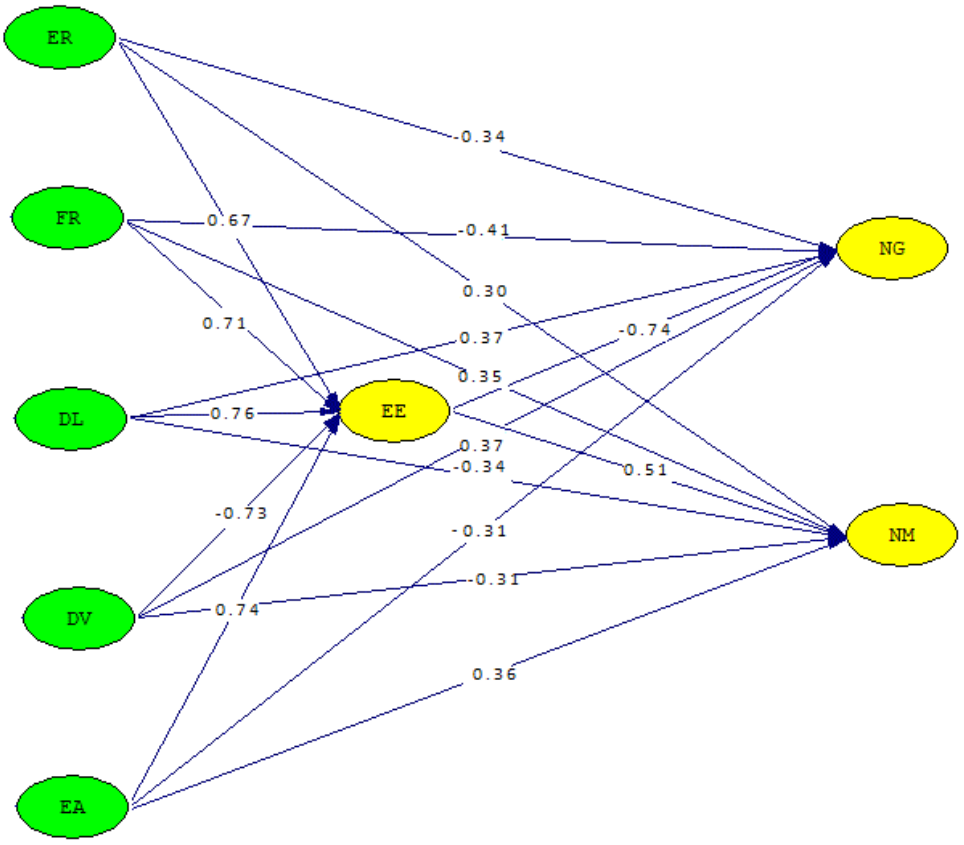

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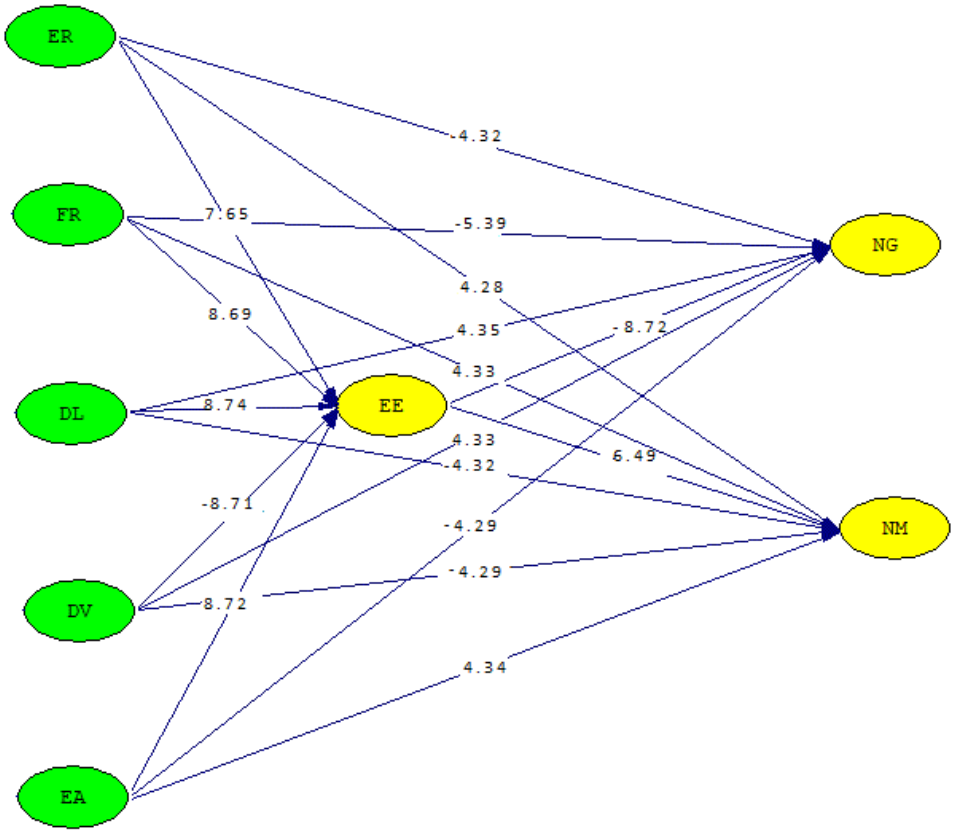
Figure 2

Final Model with T-values



Based on the information in Table 2, the results indicate that the model predicting the attitude towards addiction in clients undergoing withdrawal based on emotion regulation strategies and attachment styles with the mediating role of Ego strength has an appropriate structural fit.

Table 2

The Results of Regression Model

Variable	Standardized Coefficients	Unstandardized Coefficients	S.E	Critical Value	p
Hope	0.504	0.412	0.004	6.458	< 0.001
Will	0.456	0.328	0.008	6.231	< 0.001
Purpose	0.345	0.310	0.023	2.743	< 0.001
Competence	0.456	0.490	0.017	4.467	< 0.001
Fidelity	0.542	0.478	0.034	7.612	< 0.001
Love	0.478	0.345	0.017	8.321	< 0.001
Care	0.541	0.509	1.156	8.321	< 0.001
Wisdom	0.489	0.411	0.017	5.519	< 0.001
Ego Strength	0.560	0.549	1.123	4.546	< 0.001
Positive Attitude Towards Addiction	0.611	0.560	1.167	6.590	< 0.001
Negative Attitude Towards Addiction	0.489	0.417	0.045	6.312	< 0.001

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Reappraisal	0.510	0.489	0.041	7.289	< 0.001
Suppression	0.348	0.311	1.119	5.211	< 0.001
Emotion Regulation Strategies	0.411	0.389	0.050	4.459	< 0.001
Avoidant Attachment	0.456	0.438	0.013	5.670	< 0.001
Ambivalent (Anxious) Attachment	0.489	0.457	0.031	7.441	< 0.001
Secure Attachment	0.518	0.510	0.028	5.504	< 0.001
Attachment Style	0.390	0.318	0.018	5.367	< 0.001

4. Discussion and Conclusion

The study demonstrated that emotion regulation strategies, secure attachment style, and Ego strength enhance negative attitudes towards addiction, while emotion regulation strategies, anxious and avoidant insecure attachment styles, and Ego strength decrease positive attitudes towards addiction. Additionally, the results showed that Ego strength plays a mediating role in the relationship between emotion regulation strategies and attachment styles with attitudes towards addiction.

In examining the impact of emotion regulation strategies on attitudes towards addiction, the results revealed that emotion regulation strategies negatively affect positive attitudes towards addiction. This finding aligns with the previous studies (Boogar et al., 2015; Campbell et al., 2019; Cavicchioli et al., 2019; Estévez et al., 2021; Gholizadeh & Manzari, 2019; Mohammadkhani et al., 2011), which showed a significant positive correlation between dimensions of cognitive emotion regulation and the inclination towards addiction. These studies also showed that the components of reappraisal and suppression in cognitive emotion regulation could predict the variable of inclination towards addiction. Accordingly, emotion regulation plays a crucial role in students' attitudes towards substances (Cavicchioli et al., 2019). This can be explained by the fact that substance abuse results from low levels of positive emotion regulation strategies and inability to effectively confront and manage emotions, especially at the onset of substance use. Inadequate emotional development, difficulty in organizing behavior and emotions, and experiencing negative emotions are characteristics of individuals who abuse substances and have positive attitudes towards addiction. These individuals use substances to alleviate distressing and exhausting emotional states. In other words, substance use is adopted as an avoidant, negative, and inefficient coping strategy for reducing personal problems. Furthermore, the results indicated that emotion regulation strategies positively impact negative attitudes towards addiction in individuals undergoing withdrawal. Moreover, this can be explained by the fact that addiction processes can be influenced by individuals' beliefs and attitudes. Individuals experiencing negative emotions like anxiety and depression may have expectations that substance use will alleviate their anxiety and tension. Using emotion regulation strategies can help addiction patients overcome emotional turmoil and change their beliefs about the "cure-all" nature of narcotics.

Regarding the impact of attachment styles on attitudes towards addiction, the results showed that a secure attachment style negatively influences positive attitudes towards addiction, whereas anxious and avoidant insecure attachment styles positively influence these attitudes. Similarly, a secure attachment style positively affects negative attitudes towards addiction, and anxious and avoidant insecure attachment styles negatively affect these attitudes. This finding aligns with the study by Hamednia et al. (2017), which showed a significant positive relationship between anxious and avoidant attachment to parents with attitudes towards substances and readiness for addiction (Hamednia et al., 2017). Furthermore, anxious and avoidant attachment to parents, mediated by attitudes towards substances, significantly correlated with readiness for addiction. In the same vein, Rahmani et al. (2019) demonstrated that as the level of insecure ambivalent attachment increases, the tendency towards addiction also increases (Rahmani et al., 2019). The study by Nakhoul et al. (2020) also indicated that a secure attachment style is significantly associated with a reduction in addiction to alcohol, cigarettes, and hookah (Nakhoul et al., 2020). This can be explained by Ainsworth's theory, suggesting that attachment helps reduce anxiety. What she calls the "base of security" allows a child to leave the attachment figure and explore their surroundings, a feature that likely leads adults towards anxiety-reducing agents (like narcotics) in adulthood. Sensitivity and responsiveness from the mother are key factors in secure attachment, but when attachment is insecure, a sense of uncertainty (anxiety and doubt) arises in the child's temperament, influencing future adult behaviors (Ainsworth et al., 2015). An individual inclined to drug use, under psychological and environmental pressures, repeatedly experiments with drugs, and since they find the

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experience pleasurable, they develop a positive attitude towards addiction.

Moreover, the results showed that Ego strength has a positive impact on negative attitudes towards addiction and a negative effect on positive attitudes towards addiction. This finding is in line with the study by Abramoff et al. (2015), which demonstrated a negative relationship between Ego strength and the inclination towards drug abuse (Abramoff et al., 2015). Essentially, Ego strength is a factor whose strength or weakness can predict a person's addiction to opioids when faced with anxiety or environmental problems. As shown by Abramov et al. (2015), ego weakness and delayed psychological maturity are significant factors in the treatment process of individuals dependent on opioids (Abramoff et al., 2015). Additionally, individuals with high Ego strength find it easy to say "no" to others and value themselves (Singh & Anand, 2015); this can indicate that Ego strength can either facilitate substance use or lead to its avoidance. Ego strength is the individual's ability to deliberately control impulses, engage in goal-directed behavior, and refrain from immediate gratification of desires, as well as the effectiveness of the ego in adapting to environmental demands. Therefore, Ego strength could be one of the influencing factors in the emergence, severity, continuity, and treatment of substance use disorders and plays a role in an individual's ability to resist substance use and control internal and external impulses. Since attitudes are a determining factor in behavior, it can be said that individuals with high Ego strength, by developing negative attitudes towards addiction, can avoid substance use.

The results also showed that emotion regulation strategies positively affect Ego strength. Concerning the relationship between emotion regulation strategies and Ego strength, this finding aligns with the study by Hagger et al. (2010) that found that ego deficiency affects self-regulatory functioning. This can be explained by the process of emotion regulation, where individuals reduce unpleasant emotions and maximize pleasant ones (Hagger et al., 2010). This process is observed in defense mechanisms as well, but the difference lies in the fact that emotion regulation strategies are consciously employed, whereas defense mechanisms operate unconsciously. Mentioning defense mechanisms is significant because part of Ego strength's function relates to them. Both emotion regulation strategies and Ego strength are crucial in coping with the stresses of the withdrawal period and maintaining adaptability.

The study's findings also indicated that a secure attachment style positively impacts Ego strength, while anxious and avoidant insecure attachment styles negatively affect Ego strength. This aligns with the previous findings (Gresham & Gullone, 2012; Mansouri & Besharat, 2019; Shanmugam et al., 2012), suggesting that a secure attachment style leads to higher ego capacity and strength. In contrast, avoidant attachment style, coupled with emotional suppression, is associated with decreased clarity and mood repair, collectively predicting low ego flexibility. Individuals with insecure attachment experience high levels of anxiety and depression; conversely, those with secure attachment choose more adaptive coping behaviors, perceive the environment as less threatening, and resolve conflicts effectively (Estévez et al., 2021; Gresham & Gullone, 2012). On the other hand, Ego strength refers to the ego's ability to manage demands and conflicts from the id, superego, and environmental requisites, enabling the individual to exhibit more adaptive behaviors. Ego strength utilizes abilities like ego control, ego resilience, defense mechanisms, and coping strategies. Therefore, just as individuals with secure attachment select adaptive behaviors in interaction with the environment (in this case, coping with the temptation of substance use), those with Ego strength also possess high coping strategies and resilience in this regard. In other words, Ego strength is a personality trait that can be internalized as a result of a secure attachment style.

5. Limitations & Suggestions

One of the primary limitations of this study is its cross-sectional design, which limits the ability to infer causal relationships between the variables examined. The findings provide correlations but cannot establish definitive cause-and-effect relationships. Additionally, the study's sample was restricted to addicts undergoing withdrawal treatment in a specific region, which may limit the generalizability of the findings to other populations or geographical areas. The reliance on self-reported measures for data collection also introduces the possibility of response bias, where participants might have provided socially desirable responses rather than accurate reflections of their actual attitudes and experiences. Furthermore, the study did not account for potential confounding variables such as socio-economic status, cultural factors, or the presence of co-occurring mental health disorders, which might have influenced the results. These limitations suggest a need for caution in interpreting the findings and imply that they may not be representative of all individuals with addiction issues.

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Future research in this area could benefit from a longitudinal design to better understand the causal relationships between emotional regulation strategies, attachment styles, Ego strength, and attitudes towards addiction. Such studies could track changes over time, providing insights into how these variables interact and influence the recovery process. Additionally, expanding the research to diverse populations across different geographic and cultural contexts would enhance the generalizability of the findings. Investigating the role of potential confounding variables, like socio-economic status and co-occurring mental health disorders, would provide a more comprehensive understanding of the factors influencing addiction and recovery. Further research could also explore intervention-based approaches, examining how targeted strategies to improve emotional regulation and strengthen Ego capacity might positively impact individuals' attitudes towards addiction and support recovery efforts. This could lead to the development of more effective, holistic treatment programs that address the psychological underpinnings of addiction.

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Declaration of Interest

The authors of this article declared no conflict of interest.

Ethics 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

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