



Comparing the Effectiveness of Emotion-Focused Therapy and Acceptance and Commitment Therapy on Recovery Motivation, Self-Control, and Relapse Prevention in Individuals with Substance Use Disorder

Farshad. Samadi^{1*}, Mandana. Moayedi²

¹ Ph.D. in Health Psychology, Imam Ali (AS) Hospital, North Khorasan University of Medical Sciences, Bojnurd, Iran

² Master of Psychology in Education of Exceptional Children, Qaenat Branch, Islamic Azad University, Qaen, Iran

* Corresponding author email address: farshadsamdi.com@gmail.com

Article Info

Article type:

Original Research

How to cite this article:

Samadi, F. & Moayedi, M. (2025). Comparing the Effectiveness of Emotion-Focused Therapy and Acceptance and Commitment Therapy on Recovery Motivation, Self-Control, and Relapse Prevention in Individuals with Substance Use Disorder. *Health Nexus*, 3(3), 1-15.

<https://doi.org/10.61838/kman.hn.5937>



© 2025 the authors. Published by KMAN Publication Inc. (KMANPUB), Ontario, Canada. This is an open access article under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.

ABSTRACT

The present study aimed to compare the effectiveness of Emotion-Focused Therapy (EFT) and Acceptance and Commitment Therapy (ACT) on recovery motivation, self-control, and relapse prevention in individuals with substance use disorder. This study employed a quasi-experimental pretest–posttest design with a control group and a two-month follow-up period. The statistical population consisted of all individuals with substance use disorder who attended addiction treatment centers in Tehran in 2026. Among eligible individuals, 45 participants were selected using convenience sampling and randomly assigned to three groups of 15 participants each: an Emotion-Focused Therapy group, an Acceptance and Commitment Therapy group, and a control group. The Emotion-Focused Therapy group received 10 90-minute intervention sessions, and the Acceptance and Commitment Therapy group received 10 90-minute intervention sessions, whereas the control group received the routine services provided by the treatment center. Data were collected using the Recovery Motivation Questionnaire, the Self-Control Scale, and the Relapse Prevention Questionnaire and were analyzed using multivariate analysis of covariance (MANCOVA) and the Bonferroni post hoc test in SPSS version 28. The results indicated that, compared with the control group, both interventions significantly increased recovery motivation and self-control and reduced the likelihood of relapse. Moreover, a significant difference was observed between the two therapeutic approaches. Specifically, Acceptance and Commitment Therapy demonstrated greater effectiveness in enhancing recovery motivation and preventing relapse, whereas Emotion-Focused Therapy showed superior effectiveness in improving self-control and emotional processing. The findings indicated that both Emotion-Focused Therapy and Acceptance and Commitment Therapy are effective in enhancing recovery motivation, improving self-control, and preventing relapse among individuals with substance use disorder. Therefore, these two interventions can be used as effective therapeutic approaches in addiction treatment centers.

Keywords: Emotion-Focused Therapy, Acceptance and Commitment Therapy, substance use disorder, recovery motivation, self-control, relapse prevention.

1. Introduction

Substance use disorders are chronic and relapsing mental and behavioral health conditions characterized by persistent substance use despite harmful physical, psychological, interpersonal, occupational, and social consequences. Contemporary conceptualizations emphasize that these disorders arise from complex interactions among neurobiological vulnerability, reinforcement processes, environmental contingencies, emotional dysregulation, impaired inhibitory control, maladaptive coping, and contextual factors that maintain substance-related behavior over time. Although advances in pharmacological and psychosocial treatments have improved treatment outcomes, relapse remains common and continues to represent one of the most important clinical challenges in addiction treatment. Substance use disorders are therefore increasingly understood not as isolated episodes of maladaptive behavior, but as multidimensional disorders requiring sustained interventions capable of addressing motivational, emotional, cognitive, behavioral, and social processes involved in both the initiation and maintenance of recovery (1). From this perspective, successful treatment cannot be limited to reducing substance consumption alone; rather, it should strengthen the psychological resources that enable individuals to remain engaged in recovery, regulate impulses and emotional states, cope with high-risk situations, and prevent a return to substance use.

One of the most important determinants of successful recovery is recovery motivation, which reflects the individual's willingness, readiness, and sustained commitment to initiate and maintain changes that are incompatible with problematic substance use. Recovery motivation is particularly important because treatment for substance use disorders often requires repeated efforts, persistence in the face of setbacks, adherence to therapeutic recommendations, and the capacity to tolerate discomfort without returning to substance use. Individuals may enter treatment with substantial ambivalence, in which the perceived benefits of abstinence coexist with strong expectations regarding the immediate reinforcing effects of substances. Consequently, motivation should not be regarded as a stable personal characteristic but as a dynamic process that may increase or decrease depending on emotional experiences, perceived self-efficacy, personal

values, treatment engagement, and exposure to environmental triggers. Effective interventions therefore need to increase the perceived meaningfulness of recovery, strengthen commitment to change, and help individuals move from short-term avoidance of distress toward sustained behavior that is consistent with long-term goals. Relapse prevention models similarly emphasize that motivation and active participation in recovery are central to maintaining behavioral change over time (2).

A second central construct in the treatment of substance use disorders is self-control. Self-control refers to the capacity to regulate impulses, delay immediate gratification, resist temptation, inhibit maladaptive responses, and maintain behavior in accordance with personally important long-term goals. In the context of addiction, impaired self-control may manifest as difficulty resisting craving, acting impulsively in response to emotional distress, abandoning treatment plans in high-risk situations, or prioritizing immediate reinforcement over long-term health and recovery. Research on self-control has consistently demonstrated that higher levels of self-regulatory capacity are associated with more adaptive psychological functioning, lower levels of problematic behavior, and greater success in maintaining goal-directed action (3). These findings are highly relevant to substance use disorders because the recurrent nature of addictive behavior often involves failures of behavioral inhibition and difficulties regulating responses to craving, stress, interpersonal conflict, and negative affect. Strengthening self-control may therefore constitute an important therapeutic mechanism through which individuals become more capable of interrupting automatic substance-related responses and sustaining recovery-oriented decisions.

Relapse is another major concern in the clinical management of substance use disorders. Relapse is not simply an isolated act of renewed substance use, but is often preceded by a progressive sequence of cognitive, emotional, behavioral, interpersonal, and situational changes. High-risk situations, negative emotional states, interpersonal conflict, craving, perceived loss of control, reduced motivation, and ineffective coping may interact to increase vulnerability to renewed use. Relapse-prevention approaches therefore focus on helping individuals identify warning signs, anticipate high-risk conditions, develop effective coping responses,

and interpret lapses in a manner that does not precipitate a complete return to previous patterns of use (2). From this viewpoint, interventions that enhance emotional processing, psychological flexibility, self-regulation, and commitment to valued goals may be particularly useful because they address processes that become activated before and during periods of elevated relapse risk.

Emotional dysregulation has increasingly been recognized as a core mechanism involved in the development, persistence, and recurrence of addictive behavior. Many individuals with substance use disorders experience difficulty identifying, tolerating, understanding, and modulating intense emotional states, and substances may be used as an immediate strategy for escaping or altering distressing internal experiences. A systematic review and meta-analysis by Stellern et al. demonstrated that emotion-regulation difficulties are strongly implicated in substance use disorders and may represent an important transdiagnostic treatment target (4). More recent systematic evidence has further shown that emotion regulation is a clinically important component of treatment across substance-related and addictive disorders, with therapeutic approaches increasingly attempting to strengthen the ability to experience emotions without resorting to maladaptive addictive behavior (5). Accordingly, treatment approaches that directly target emotional awareness, emotional acceptance, emotional transformation, and adaptive regulation may be especially relevant for reducing the psychological conditions that contribute to craving and relapse.

Emotion-Focused Therapy is one such approach. Emotion-Focused Therapy conceptualizes emotions as fundamental adaptive systems that organize experience, guide behavior, communicate needs, and contribute to identity and interpersonal functioning. Within this framework, psychological problems may emerge when emotions are avoided, suppressed, insufficiently processed, or organized around maladaptive emotional schemes. Treatment therefore aims not merely to control emotions but to increase emotional awareness, facilitate access to primary adaptive emotions, transform maladaptive emotional responses, and develop more flexible ways of responding to emotionally significant situations (6). The therapeutic process involves helping clients identify and symbolize

emotional experience, differentiate primary from secondary emotions, tolerate painful affect, and use adaptive emotional responses to revise maladaptive patterns of meaning and behavior. This emphasis is especially pertinent to individuals with substance use disorders who may use substances to escape shame, guilt, anxiety, sadness, anger, loneliness, or unresolved traumatic experiences.

The process-experiential foundations of Emotion-Focused Therapy further emphasize that emotional change occurs through active engagement with emotional experience rather than through intellectual analysis alone. Therapeutic change involves accessing core emotional states, making implicit emotional meanings explicit, and transforming maladaptive emotion schemes through new emotional experiences (7). In addition treatment, this approach may help individuals recognize the emotional antecedents of substance use, reduce reliance on substances as a means of affect regulation, and develop more adaptive strategies for coping with craving and interpersonal distress. Emotion-Focused Therapy also places importance on self-compassion, resolution of unfinished emotional experiences, and reduction of shame and self-criticism, which are frequently relevant in populations struggling with recurrent substance use and repeated relapse.

Subsequent elaborations of Emotion-Focused Therapy have continued to emphasize the importance of helping clients work directly with difficult emotional states in order to produce enduring change. Greenberg described the therapeutic process as one in which maladaptive emotional responses can be transformed through the activation of more adaptive emotions, thereby allowing clients to construct healthier meanings and behavioral possibilities (8). This model suggests several mechanisms through which Emotion-Focused Therapy may improve addiction-related outcomes. By increasing awareness of emotional triggers, individuals may detect high-risk states earlier. By developing greater tolerance for distress, they may become less likely to use substances as an immediate avoidance strategy. By transforming shame, fear, anger, or hopelessness, they may experience greater confidence in their ability to remain in recovery. Finally, by improving emotional regulation, the therapy may indirectly enhance self-control because behavior becomes less governed by intense and poorly processed affective states.

A conceptually different but potentially complementary intervention is Acceptance and Commitment Therapy. ACT is a contextual behavioral approach that seeks to increase psychological flexibility, defined as the capacity to remain in contact with present-moment experience while behaving in ways that are consistent with personally chosen values. The ACT model proposes that psychological suffering is frequently intensified by experiential avoidance, cognitive fusion, behavioral rigidity, and attempts to control unwanted internal experiences. Rather than attempting to eliminate distressing thoughts and feelings, ACT teaches individuals to alter their relationship with them so that such experiences exert less behavioral control (9). The model is organized around six interrelated processes: acceptance, cognitive defusion, present-moment awareness, self-as-context, values clarification, and committed action. Together, these processes are intended to help individuals remain psychologically open, aware, and behaviorally engaged in meaningful action even when distress, craving, or difficult thoughts are present.

The clinical procedures of ACT are particularly relevant to substance use disorders because addictive behavior often functions as a form of experiential avoidance. Individuals may use substances to escape anxiety, painful memories, loneliness, shame, anger, craving, or other unwanted internal experiences. From an ACT perspective, the problem is not necessarily the presence of these experiences but the rigid behavioral patterns that emerge when individuals organize their lives around avoiding or controlling them. ACT therefore encourages willingness to experience craving and emotional discomfort without acting on them, teaches cognitive defusion from substance-related thoughts, strengthens mindful awareness of urges, and clarifies personally meaningful values that can support sustained recovery (10). By shifting the focus from symptom control to values-guided action, ACT may be especially useful for strengthening recovery motivation because it connects abstinence and treatment participation with broader life directions rather than framing recovery solely as avoidance of substance use.

The empirical status of ACT has strengthened considerably over the past two decades. Reviews of the broader ACT literature have shown that the intervention has been applied across a wide range of psychological problems

and that its effects are supported by an expanding body of meta-analytic evidence (11). Although ACT is frequently discussed in relation to anxiety and depressive disorders, its emphasis on experiential avoidance, cognitive fusion, and psychological flexibility is transdiagnostic and can be applied to problems in which maladaptive attempts to regulate internal experiences play a central role (12). This transdiagnostic framework is highly applicable to addiction, where craving, negative affect, intrusive thoughts, and distress may become triggers for habitual substance-related responses.

Evidence specifically addressing substance use disorders also supports the potential usefulness of ACT. Reviews of ACT in substance use populations have suggested that acceptance-based and values-oriented processes may contribute to reductions in substance use, improvements in treatment engagement, and greater capacity to cope with craving and negative internal experiences (13). A systematic review by Díez-Bejarano and Chaves similarly concluded that ACT represents a promising intervention for addictive disorders, particularly because it targets experiential avoidance and promotes flexible behavioral responses in the presence of urges and distress (14). More recently, systematic review and meta-analytic evidence has indicated that ACT can produce meaningful benefits across addictive behaviors, further supporting its clinical relevance as an intervention for populations struggling with persistent and recurrent patterns of addiction (15).

The mechanisms targeted by ACT may be directly relevant to the three outcomes considered in the present study. Recovery motivation may be strengthened through values clarification and committed action because individuals are encouraged to identify why recovery matters and to translate personally important values into concrete behavioral commitments. Self-control may improve through mindfulness and cognitive defusion, which can reduce automatic responses to cravings and increase the capacity to observe impulses without acting on them. Relapse prevention may also benefit from increased acceptance of distress and greater willingness to remain in contact with high-risk internal experiences without using substances. In contrast to strategies based solely on suppressing or resisting craving, ACT attempts to reduce the behavioral dominance of craving by changing the individual's relationship to

internal events. This distinction may be especially important for individuals who repeatedly relapse when efforts to control thoughts, feelings, or urges become ineffective.

Despite conceptual differences, Emotion-Focused Therapy and ACT share several clinically meaningful features. Both approaches reject simple symptom suppression as the sole goal of treatment and instead emphasize changing how individuals relate to difficult internal experiences. Emotion-Focused Therapy emphasizes the identification, acceptance, processing, and transformation of emotion, whereas ACT focuses on acceptance, defusion, mindful awareness, psychological flexibility, and values-consistent action. Emotion-Focused Therapy may therefore exert particularly strong effects on self-control by reducing the intensity and dysregulation of emotional states that precipitate impulsive behavior, while ACT may have especially pronounced effects on recovery motivation and relapse prevention by strengthening values-guided behavior and the capacity to tolerate cravings without behavioral enactment. At the same time, both treatments can plausibly influence all three outcomes through partially overlapping mechanisms involving reduced avoidance, increased awareness, and more adaptive behavioral regulation.

The available literature nevertheless reveals an important need for direct comparative research. Much of the existing evidence has evaluated emotion regulation approaches or ACT independently, and comparatively fewer studies have examined whether one approach has differential advantages for specific recovery-related outcomes among individuals with substance use disorder. This gap is clinically significant because addiction treatment centers often need to select interventions based not only on whether a treatment is generally effective, but also on which psychological processes it most effectively changes. Recent evidence on emotional regulation in addictive disorders highlights the importance of targeting affective mechanisms (4, 5), while ACT research emphasizes psychological flexibility and values-based behavioral change (11, 15). A direct comparison can therefore clarify whether interventions with different theoretical foundations produce distinct patterns of improvement in recovery motivation, self-control, and relapse prevention.

Such comparisons are particularly valuable in outpatient addiction treatment, where individuals encounter ongoing exposure to environmental cues, interpersonal stressors, emotional triggers, and opportunities for renewed substance use outside the treatment setting. In this context, a clinically useful intervention must do more than produce short-term reductions in symptoms; it should foster capacities that remain functional after formal treatment sessions have ended. Follow-up assessment is therefore essential because immediate posttreatment improvement does not necessarily indicate sustained recovery. Evaluating treatment outcomes over time makes it possible to determine whether gains in recovery motivation and self-control are maintained and whether reductions in relapse vulnerability persist after the active intervention has concluded. This issue is especially important given the chronic and recurrent nature of substance use disorders and the need for interventions capable of supporting durable behavior change (1).

Taken together, the theoretical and empirical literature suggests that both Emotion-Focused Therapy and Acceptance and Commitment Therapy may represent valuable interventions for individuals with substance use disorders, although they may achieve their effects through different therapeutic mechanisms. Emotion-Focused Therapy directly addresses emotional dysregulation, unresolved affective experiences, shame, self-criticism, and maladaptive emotional responses (6-8), whereas ACT targets experiential avoidance, cognitive fusion, psychological inflexibility, and disconnection from personally meaningful values (9, 10). Given the importance of recovery motivation, self-control, and relapse prevention in sustained recovery, examining the comparative effects of these approaches can contribute to more precise psychological treatment planning for substance use disorder.

Accordingly, the present study aimed to compare the effectiveness of Emotion-Focused Therapy and Acceptance and Commitment Therapy on recovery motivation, self-control, and relapse prevention in individuals with substance use disorder.

2. Methods and Materials

2.1. Study Design and Participants

The present study was applied in purpose and employed a quasi-experimental pretest–posttest design with a control group and a two-month follow-up assessment. The study was designed to compare the effectiveness of two psychological interventions, Emotion-Focused Therapy (EFT) and Acceptance and Commitment Therapy (ACT), in improving recovery motivation, self-control, and relapse-related outcomes among individuals diagnosed with substance use disorder. The statistical population consisted of all individuals with substance use disorder who attended outpatient addiction treatment centers in Tehran, Iran, during 2026. Following coordination with the participating treatment centers, potentially eligible individuals underwent an initial screening procedure to determine whether they met the study eligibility criteria. The inclusion criteria were a diagnosis of substance use disorder based on the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision (DSM-5-TR) criteria, an age between 20 and 50 years, at least basic literacy sufficient to read and complete the study questionnaires, absence of severe concurrent psychiatric disorders such as psychotic disorders, absence of significant cognitive impairment that could interfere with participation in the intervention or completion of the measures, and willingness to participate regularly in the treatment sessions. The exclusion criteria included absence from more than two intervention sessions, concurrent use of psychoactive medications outside the prescribed treatment program that could substantially influence psychological functioning or study outcomes, withdrawal of consent, and unwillingness to continue participation during the intervention or follow-up period. A total of 45 eligible participants were recruited using convenience sampling and were subsequently randomly assigned to three groups of 15 participants each: the Emotion-Focused Therapy group, the Acceptance and Commitment Therapy group, and the control group. Before the interventions, all participants completed the study measures as a pretest. Participants in the Emotion-Focused Therapy group received ten 90-minute treatment sessions, while participants in the Acceptance and Commitment Therapy group also received ten 90-minute sessions based

on the ACT protocol. The control group did not receive either of the experimental psychological interventions during the study period and continued to receive the routine services ordinarily provided by the addiction treatment center. Immediately after completion of the intervention period, all three groups completed the posttest assessments under comparable conditions. To examine the maintenance of treatment effects, the same measures were administered again two months after the posttest as the follow-up assessment. Participants were informed about the objectives and procedures of the study, the voluntary nature of participation, confidentiality of their information, and their right to discontinue participation at any stage without adverse consequences.

2.2. Data Collection Tools

Recovery motivation was assessed using the Recovery Capital Questionnaire developed by Groshkova et al. (2013). This instrument was designed to assess personal, social, and psychological resources that facilitate and sustain recovery from substance-related problems and has been used extensively in research examining recovery processes, motivation for continued abstinence, and the maintenance of positive behavioral change among individuals with substance use disorders. The original version contains 50 items addressing multiple dimensions of recovery-related functioning, including perceived social support, psychological well-being, self-efficacy, hope, engagement in recovery-oriented activities, personal resources, and the availability of social and environmental supports that may contribute to successful recovery. Items are rated on a five-point Likert-type scale, with responses reflecting the degree to which each statement describes the participant's current circumstances or experience. After appropriate scoring of the items, a higher total score reflects greater recovery capital and, within the context of the present study, stronger psychological and contextual resources supporting recovery motivation and continued engagement in the recovery process. Previous psychometric studies have demonstrated strong internal consistency for this measure, with Cronbach's alpha coefficients generally exceeding .90, and have provided satisfactory evidence for its construct and convergent validity (Groshkova et al., 2013). In the present study, the questionnaire was administered at the pretest,

posttest, and two-month follow-up assessments to evaluate changes in participants' recovery-related motivation and resources over time.

Self-control was measured using the Self-Control Scale developed by Tangney, Baumeister, and Boone (2004). The scale consists of 36 items designed to assess the individual's general capacity to regulate thoughts, emotions, impulses, and behavior in accordance with longer-term goals. The instrument evaluates several interrelated aspects of self-regulation, including impulse control, resistance to temptation, emotional regulation, self-discipline, regulation of habitual behavior, persistence in goal-directed activities, and the ability to inhibit maladaptive or immediately rewarding responses. Participants respond to each item on a five-point Likert-type scale ranging from strong disagreement to strong agreement, and several negatively worded items are reverse-scored before calculation of the total score. Higher scores indicate greater self-control and a stronger ability to regulate impulses and behaviors, whereas lower scores reflect greater difficulty in resisting immediate urges and maintaining adaptive behavioral regulation. This characteristic is particularly relevant to substance use disorder because impaired inhibitory control, difficulties in emotion regulation, and vulnerability to immediate reinforcement may contribute to craving and recurrent substance use. The Self-Control Scale has demonstrated satisfactory psychometric properties across different populations, with reported Cronbach's alpha coefficients typically ranging from .83 to .89, along with acceptable evidence of convergent, discriminant, and predictive validity (Tangney et al., 2004). In the present study, the scale was administered at all three measurement points to determine whether the interventions produced improvements in participants' ability to manage impulses, regulate their behavior, and resist substance-related temptations.

Relapse-related vulnerability was assessed using the Relapse Early Warning Questionnaire developed by Miller and Harris (2000). The instrument contains 28 items intended to identify cognitive, emotional, behavioral, and motivational warning signs that may precede a return to substance use. The questionnaire assesses indicators such as increased preoccupation with substance use, intensification

of negative emotional states, reduced behavioral and emotional self-regulation, diminished commitment to treatment, weakening of recovery-oriented motivation, difficulty coping with high-risk situations, and the re-emergence of behavioral patterns associated with previous substance use. Responses are recorded on a Likert-type scale, with higher total scores indicating a greater presence of relapse warning signs and consequently a higher estimated risk of relapse. Accordingly, reductions in scores following treatment may be interpreted as indicating greater relapse prevention capacity and reduced susceptibility to substance use recurrence. The instrument has been used in studies of individuals with substance use disorders and has shown satisfactory psychometric characteristics, including high internal consistency, with Cronbach's alpha coefficients reported to exceed .90 in previous investigations (Miller & Harris, 2000). In the present study, the questionnaire was completed during the pretest, posttest, and two-month follow-up phases in order to examine the immediate and sustained effects of Emotion-Focused Therapy and Acceptance and Commitment Therapy on participants' relapse-related warning signs and vulnerability to renewed substance use.

2.3. Interventions

The Emotion-Focused Therapy intervention was delivered in ten 90-minute sessions and was designed to increase participants' emotional awareness, facilitate adaptive emotional processing, reduce maladaptive emotional avoidance, and strengthen emotion-regulation capacities relevant to recovery from substance use disorder. The first session focused on introducing group members, explaining the goals and structure of therapy, establishing group rules, developing the therapeutic alliance, and providing psychoeducation concerning the nature and functions of emotions. The second session addressed the distinction between primary and secondary emotions and helped participants examine how different emotional experiences were related to substance use behaviors. In the third session, emphasis was placed on enhancing emotional awareness, improving the ability to identify and label emotional states, and recognizing situations and experiences that could trigger substance use. The fourth session focused on helping participants remain in contact with and accept

difficult emotional experiences rather than engaging in avoidance or suppression through substance use. During the fifth session, unresolved emotional experiences and potentially traumatic or distressing personal events associated with maladaptive emotional responses were explored within a supportive therapeutic context. The sixth session was devoted to transforming maladaptive emotional responses and facilitating the development of healthier and more adaptive emotional experiences and responses. The seventh session emphasized self-empathy and self-compassion and addressed shame, guilt, and harsh self-criticism, which are frequently associated with substance-related problems and may undermine recovery efforts. In the eighth session, participants practiced emotion-regulation skills applicable to high-risk situations, including circumstances involving craving, interpersonal distress, negative affect, and urges to use substances. The ninth session integrated previously learned skills with problem-solving strategies and individualized planning for managing high-risk situations and preventing relapse. Finally, the tenth session included a comprehensive review of therapeutic skills, evaluation of participants' progress, identification of remaining emotional vulnerabilities, and development of an individualized plan for maintaining therapeutic gains after the conclusion of treatment. Throughout the intervention, experiential techniques were emphasized to help participants recognize, tolerate, process, and transform difficult emotional states rather than responding to them through substance use.

The Acceptance and Commitment Therapy intervention was also implemented in ten 90-minute sessions and was structured around the central ACT processes of acceptance, cognitive defusion, present-moment awareness, self-as-context, values clarification, and committed action. The first session introduced the participants to the treatment framework, established the therapeutic alliance, explained the basic principles of ACT, and presented the psychological flexibility model and its relevance to substance use and recovery. The second session focused on experiential avoidance and helped participants recognize how attempts to escape, suppress, or control unwanted thoughts, emotions, and bodily sensations could contribute to the maintenance of substance use. Acceptance-based exercises were introduced to increase willingness to experience uncomfortable internal

states without engaging in substance use as an avoidance strategy. In the third session, cognitive defusion techniques were taught to help participants distance themselves from craving-related thoughts and other problematic cognitions rather than treating them as literal commands that required behavioral action. The fourth session introduced mindfulness and present-moment awareness exercises, with an emphasis on observing thoughts, emotions, physical sensations, and urges to use substances without judgment or automatic reaction. The fifth session focused on the ACT concept of self-as-context and encouraged participants to develop an observing perspective toward their internal experiences, thereby reducing overidentification with substance-related thoughts, emotions, and self-evaluations. During the sixth session, participants identified personally meaningful values across important life domains and examined the discrepancy between those values and patterns associated with substance use. The seventh session translated identified values into specific goals and value-consistent actions and emphasized strengthening commitment to recovery and enhancing motivation for sustained behavioral change. The eighth session focused specifically on managing craving and substance-use urges through acceptance, mindfulness, urge observation, and cognitive defusion strategies. In the ninth session, participants practiced applying ACT skills to high-risk situations, learned to distinguish a temporary lapse from a full relapse, and developed flexible strategies for responding constructively to setbacks without abandoning recovery-oriented behavior. The final session involved a review and integration of the ACT skills, preparation of an individualized recovery-maintenance plan, reinforcement of commitment to personally important values, anticipation of future barriers, and therapeutic termination. Across sessions, the intervention emphasized increasing psychological flexibility so that participants could make recovery-consistent behavioral choices even in the presence of cravings, distressing emotions, or difficult thoughts.

2.4. Data Analysis

Following completion of data collection, the data were entered into IBM SPSS Statistics version 28 for statistical analysis. Descriptive statistics were initially calculated to summarize the demographic characteristics of the

participants and the distributions of the study variables. Frequencies and percentages were used for categorical demographic variables, whereas means and standard deviations were calculated for continuous variables and for scores on recovery motivation, self-control, and relapse-related vulnerability at the pretest, posttest, and follow-up assessments. Before conducting inferential analyses, the assumptions underlying the parametric procedures were examined. The normality of the distribution of outcome variables was evaluated using the Shapiro–Wilk test and inspection of the relevant distributional indices. Homogeneity of variances across the three study groups was assessed using Levene's test, while equality of covariance matrices was examined using Box's M test. The homogeneity of regression slopes was also evaluated to ensure that the association between baseline scores and subsequent outcome scores was sufficiently comparable across the treatment and control groups. Where repeated measurements were incorporated into the analysis, the relevant assumptions associated with within-subject comparisons were also examined. After confirmation that the principal statistical assumptions were adequately satisfied, multivariate analysis of covariance with repeated measures was conducted to evaluate differences between the Emotion-Focused Therapy, Acceptance and Commitment Therapy, and control groups across the study outcomes

while accounting for baseline differences. This analytic approach made it possible to examine the effects of group, time, and changes in the outcome variables across the pretest, posttest, and two-month follow-up assessments, as well as to determine whether patterns of change differed between the two active treatment conditions and the control condition. When statistically significant omnibus effects were identified, Bonferroni-adjusted post hoc comparisons were performed to determine which pairs of groups differed significantly and to reduce inflation of the familywise Type I error rate resulting from multiple comparisons. All statistical tests were conducted using a two-tailed significance criterion, and the threshold for statistical significance was set at $p < .05$.

3. Findings and Results

A total of 45 participants were examined in three groups: Emotion-Focused Therapy (EFT), Acceptance and Commitment Therapy (ACT), and control, with 15 participants in each group. The mean ages of participants in the EFT, ACT, and control groups were 34.26, 35.13, and 34.80 years, respectively. No statistically significant differences were observed among the three groups in demographic characteristics, including age, educational level, and marital status.

Table 1

Descriptive Statistics for the Study Variables Across the Three Groups at Pretest, Posttest, and Follow-Up

Variable	Group	Pretest, M ± SD	Posttest, M ± SD	Follow-Up, M ± SD
Recovery Motivation	EFT	112.45 ± 9.21	138.26 ± 10.15	141.10 ± 9.87
	ACT	113.06 ± 8.94	142.35 ± 9.62	145.28 ± 9.14
	Control	111.73 ± 9.56	114.20 ± 9.31	113.86 ± 9.74
Self-Control	EFT	78.26 ± 7.45	98.40 ± 8.11	101.20 ± 7.83
	ACT	77.93 ± 7.18	96.86 ± 8.43	98.13 ± 8.05
	Control	79.06 ± 7.62	80.13 ± 7.35	79.86 ± 7.41
Relapse Prevention	EFT	65.40 ± 6.83	48.26 ± 6.21	45.80 ± 6.05
	ACT	66.13 ± 6.57	45.73 ± 5.98	42.66 ± 5.72
	Control	65.86 ± 6.72	64.93 ± 6.40	65.20 ± 6.33

The results presented in Table 1 indicate that the mean scores for recovery motivation and self-control increased in both intervention groups at the posttest and follow-up

assessments. In addition, the mean relapse-prevention scores decreased in the treatment groups, indicating a reduction in relapse risk compared with the control group.

Table 2

Results of Multivariate Analysis of Covariance for the Effect of Treatment Group on the Study Variables

Test	Value	F	Hypothesis df	Error df	p
Pillai's Trace	0.73	18.42	6	82	< .001
Wilks' Lambda	0.27	20.15	6	80	< .001
Hotelling's Trace	2.63	21.32	6	78	< .001
Roy's Largest Root	2.54	34.78	3	41	< .001

According to the results presented in Table 2, the overall effect of treatment group on the linear combination of the dependent variables—recovery motivation, self-control, and relapse prevention—was statistically significant ($p < .001$).

Therefore, significant differences existed among the three study groups in the changes observed in the dependent variables.

Table 3

Results of Repeated-Measures Analysis of Variance for the Effects of Time and the Time $\times$ Group Interaction

Source of Variation	Variable	F	p	Effect Size
Time	Recovery Motivation	42.65	< .001	0.68
Time $\times$ Group	Recovery Motivation	18.73	< .001	0.52
Time	Self-Control	36.42	< .001	0.63
Time $\times$ Group	Self-Control	15.86	< .001	0.48
Time	Relapse Prevention	45.31	< .001	0.70
Time $\times$ Group	Relapse Prevention	21.24	< .001	0.55

The results presented in Table 3 showed that both the main effect of time and the Time $\times$ Group interaction effect were statistically significant for all three dependent variables

($p < .001$). This finding indicates that the patterns of change in the study variables over time differed between the treatment groups and the control group.

Table 4

Results of Bonferroni Post Hoc Tests for Pairwise Comparisons Between Groups

Variable	Group Comparison	Mean Difference	p
Recovery Motivation	ACT – Control	27.15	< .001
Recovery Motivation	EFT – Control	23.42	< .001
Recovery Motivation	ACT – EFT	3.73	.041
Self-Control	EFT – Control	20.34	< .001
Self-Control	ACT – Control	17.92	< .001
Self-Control	EFT – ACT	2.41	.048
Relapse Prevention	ACT – Control	–22.27	< .001
Relapse Prevention	EFT – Control	–18.46	< .001
Relapse Prevention	ACT – EFT	–3.81	.039

The results of the Bonferroni post hoc comparisons indicated that, compared with the control group, both therapeutic interventions produced statistically significant increases in recovery motivation and self-control and significant reductions in scores associated with relapse risk ($p < .001$). Furthermore, Acceptance and Commitment Therapy was more effective than Emotion-Focused Therapy in enhancing recovery motivation and reducing relapse risk,

whereas Emotion-Focused Therapy demonstrated a relative advantage over Acceptance and Commitment Therapy in improving self-control.

4. Discussion and Conclusion

The present study compared the effectiveness of Emotion-Focused Therapy (EFT) and Acceptance and Commitment Therapy (ACT) in improving recovery

motivation, self-control, and relapse prevention among individuals with substance use disorder. The findings showed that both interventions produced significant improvements in all three outcomes compared with the control group and that these improvements were maintained at the two-month follow-up. More specifically, participants who received either EFT or ACT demonstrated increased recovery motivation and self-control and decreased relapse-risk scores across the posttest and follow-up assessments. The significant Time $\times$ Group interactions indicated that these changes could not be attributed merely to the passage of time and were associated with participation in the therapeutic interventions. Furthermore, the pairwise comparisons revealed meaningful differences between the two active treatments. ACT was more effective than EFT in increasing recovery motivation and reducing relapse risk, whereas EFT showed a relative advantage in improving self-control. These findings suggest that both approaches can be beneficial in the treatment of substance use disorder, although their effects may be more pronounced for different psychological mechanisms involved in the recovery process.

The finding that both EFT and ACT significantly enhanced recovery motivation is consistent with contemporary perspectives that conceptualize substance use disorder as a chronic and recurrent condition requiring sustained psychological engagement rather than short-term symptom reduction alone. Recovery motivation is a crucial determinant of treatment adherence, persistence in abstinence-related efforts, and willingness to tolerate short-term discomfort in pursuit of longer-term change. Individuals with substance use disorders often fluctuate between motivation for change and attraction to the immediate reinforcing properties of substance use, and therapeutic interventions are therefore required to strengthen personally meaningful reasons for recovery and improve the individual's capacity to remain engaged with treatment. The present findings are compatible with the broader account of substance use disorders presented by Volkow and Blanco, who emphasized the complex interaction between neurobiological, psychological, and contextual factors in both addiction and recovery (1). They are also consistent with relapse-prevention models, according to which motivational commitment and active involvement in

adaptive coping are essential for maintaining recovery-related behavioral change (2).

The greater effectiveness of ACT in enhancing recovery motivation may be explained by its explicit focus on values clarification and committed action. ACT does not merely ask individuals to suppress craving or avoid substance use; rather, it helps them identify personally important life directions and link recovery-related behaviors to those values. This process can transform abstinence from a negatively framed task of avoiding substances into a positively framed commitment to a meaningful life. Within ACT, individuals are encouraged to identify the values that have been undermined by substance use and to make concrete behavioral commitments consistent with those values, even in the presence of uncomfortable internal experiences (10). This mechanism may strengthen recovery motivation because behavioral change becomes connected to personally chosen purposes rather than externally imposed treatment goals. The theoretical foundations of ACT similarly emphasize psychological flexibility and the ability to maintain value-consistent action despite difficult thoughts, emotions, and bodily sensations (9). Therefore, the stronger improvement in recovery motivation observed in the ACT group can reasonably be interpreted as a consequence of increased value awareness, willingness, and commitment to recovery-oriented behavior.

The present finding regarding ACT is also supported by previous reviews of its application to substance use and addictive behaviors. Osaji et al. concluded that ACT can be useful for individuals with substance use disorders because it reduces experiential avoidance and promotes more adaptive responses to cravings, negative affect, and substance-related thoughts (13). Likewise, Díez-Bejarano and Chaves found that ACT represents a promising intervention for addictive disorders and highlighted the clinical importance of acceptance, mindfulness, and values-guided action in modifying addictive behavior (14). More recent meta-analytic findings have further demonstrated the effectiveness of ACT across addictive behaviors and suggest that its benefits are not limited to a single form of addiction (15). The present study therefore extends this literature by suggesting that ACT may be particularly advantageous when treatment aims to strengthen sustained motivation for recovery.

The second major finding was that both interventions significantly improved self-control compared with the control condition. This finding is clinically important because impaired self-control is a central feature of many addictive behaviors. Difficulties resisting immediate reinforcement, regulating impulses, and inhibiting habitual responses may increase vulnerability to substance use when individuals encounter craving, stress, or negative affect. Tangney et al. demonstrated that higher self-control is associated with better psychological adjustment, lower pathology, and more successful regulation of behavior across multiple life domains (3). In substance use disorder, enhanced self-control may allow individuals to create a greater psychological distance between an urge and a behavioral response, thereby increasing the probability that they will choose actions that are consistent with recovery goals rather than automatically returning to substance use.

Although both interventions improved self-control, EFT demonstrated a relative advantage over ACT. This difference may be explained by the central role of emotional dysregulation in impulsive and substance-related behavior. Individuals frequently use substances in response to difficult emotional experiences such as anger, shame, anxiety, loneliness, hopelessness, and interpersonal distress. When emotions are poorly understood or inadequately regulated, behavior may become increasingly organized around immediate relief. EFT directly targets these processes by helping individuals identify, label, tolerate, process, and transform maladaptive emotional experiences rather than reacting to them impulsively. According to Greenberg, adaptive functioning requires access to emotional information and the capacity to transform maladaptive emotional responses through healthier emotional experiences (6). EFT may therefore improve self-control not simply by strengthening inhibition, but by reducing the emotional pressure that makes impulsive behavior more likely.

The superiority of EFT in improving self-control is also understandable from a process-experiential perspective. Elliott et al. proposed that therapeutic change occurs when individuals become more aware of implicit emotional meanings, actively process difficult emotional states, and develop new ways of responding to previously overwhelming experiences (7). For individuals with

substance use disorder, this process may reduce the tendency to rely on substances as an immediate strategy for managing emotional discomfort. Greenberg further emphasized that maladaptive emotions can be transformed by activating adaptive emotional responses, thereby promoting more coherent self-regulation and healthier behavioral choices (8). In this sense, improved self-control after EFT may represent the behavioral consequence of greater emotional differentiation, reduced emotional avoidance, and a stronger capacity to tolerate affect without engaging in substance use.

The current findings are consistent with the growing literature identifying emotion regulation as a major treatment target in addictive disorders. Stellern et al., in a systematic review and meta-analysis, demonstrated that emotion-regulation difficulties are closely associated with substance use disorders and may play an important role in both the development and maintenance of addictive behaviors (4). More recently, Chrétien et al. systematically reviewed emotion-regulation approaches in substance-related and addictive disorders and showed that emotion regulation is increasingly recognized as a central mechanism of treatment and recovery (5). These findings support the interpretation that the improvements observed in the EFT group may have occurred because the intervention addressed one of the affective mechanisms that contributes to impaired behavioral control. When individuals become more capable of understanding and regulating their emotional experiences, they may become less dependent on immediate substance-related coping and better able to exercise self-control in high-risk circumstances.

The third major finding was that both EFT and ACT significantly reduced relapse-related risk compared with the control group, with ACT demonstrating greater effectiveness than EFT. This result is consistent with relapse-prevention theory, which conceptualizes relapse as a process rather than a single event. Relapse may emerge through the interaction of high-risk situations, negative affect, ineffective coping, craving, reduced self-efficacy, and maladaptive cognitive responses to lapses (2). Both EFT and ACT may reduce these risks, although they do so through somewhat different mechanisms. EFT may lower relapse vulnerability by improving emotional processing and reducing the need to use substances as an emotion-regulation strategy. ACT, by contrast, may be especially effective

because it directly teaches individuals to experience urges, thoughts, and emotional distress without automatically acting on them.

The greater effect of ACT on relapse prevention can be understood through the concept of experiential avoidance. From the ACT perspective, attempts to suppress, escape, or eliminate unwanted internal experiences may paradoxically strengthen their behavioral influence. Substance use may become negatively reinforced when it temporarily reduces distress, anxiety, shame, craving, or other uncomfortable states. ACT teaches clients to adopt a more accepting stance toward these experiences and to reduce cognitive fusion with thoughts such as “I cannot tolerate this urge” or “I need to use in order to feel better” (9). By cultivating mindfulness and cognitive defusion, participants may learn to observe cravings as temporary psychological events rather than commands requiring action. This process can increase behavioral choice in high-risk situations and thereby reduce relapse vulnerability.

The finding that ACT was particularly effective in relapse prevention also aligns with evidence regarding the broader empirical status of the approach. Gloster et al., in their review of meta-analyses, concluded that ACT has accumulated substantial empirical support across a range of psychological difficulties and that psychological flexibility represents an important transdiagnostic process of change (11). Although Twohig and Levin focused on anxiety and depression, their review further illustrates the transdiagnostic utility of ACT in targeting maladaptive relationships with internal experiences rather than disorder-specific symptoms alone (12). This principle is directly relevant to substance use because cravings, intrusive substance-related thoughts, anxiety, depressed mood, shame, and interpersonal distress may all precipitate relapse. Strengthening psychological flexibility may therefore make individuals less vulnerable to returning to substance use when these experiences emerge.

The present pattern of results suggests that ACT and EFT should not necessarily be regarded as mutually exclusive or competing approaches. Rather, they appear to emphasize partially overlapping but distinct therapeutic mechanisms. Both encourage greater contact with internal experience rather than avoidance, and both seek to increase adaptive functioning in the presence of emotional discomfort.

However, EFT places stronger emphasis on accessing, differentiating, processing, and transforming emotional experience, whereas ACT focuses more directly on changing the functional relationship between internal events and behavior through acceptance, defusion, mindfulness, values, and committed action. These differences may help explain why EFT demonstrated a relative advantage in self-control while ACT showed greater effectiveness in recovery motivation and relapse prevention. The findings therefore support a process-based interpretation in which treatment effects vary according to the psychological mechanisms most strongly targeted by each intervention.

Another important finding was that therapeutic gains were maintained at the two-month follow-up. Recovery motivation and self-control remained higher than at baseline, while relapse-related scores remained lower in both intervention groups. Maintenance of treatment effects is particularly important in substance use disorder because short-term improvement does not necessarily translate into sustained recovery. The chronic and recurrent course of substance-related problems means that individuals continue to encounter environmental cues, interpersonal stress, negative emotions, and craving after formal treatment has ended (1). The persistence of improvement suggests that participants may have internalized skills that remained useful beyond the active intervention period. In EFT, these may have included emotional awareness, acceptance of affect, self-compassion, and adaptive emotional regulation. In ACT, they may have included mindfulness, willingness, cognitive defusion, values clarification, and committed action.

Overall, the findings provide further support for the clinical relevance of both emotion-focused and acceptance-based approaches in the treatment of substance use disorder. Existing evidence has increasingly emphasized that successful addiction treatment requires more than attempts to suppress symptoms or prevent access to substances. Effective treatment must address the internal processes through which cravings, emotions, thoughts, and environmental triggers acquire behavioral influence. The systematic evidence on emotion regulation supports interventions that improve emotional awareness and regulation (4, 5), while the ACT literature supports strategies that promote acceptance, psychological flexibility, and

values-consistent behavior (14, 15). The present study contributes to this literature by directly comparing the two approaches and demonstrating that both are effective, while also suggesting that their relative strengths may differ across specific recovery-related outcomes.

The study had several limitations that should be considered when interpreting the findings. The sample consisted of only 45 individuals recruited through convenience sampling from outpatient addiction treatment centers in Tehran, which limits the generalizability of the findings to broader populations with substance use disorder. The relatively small group sizes may also have reduced the statistical power to detect more subtle differences between the two interventions. In addition, the follow-up period was limited to two months and therefore does not allow firm conclusions regarding the long-term durability of treatment effects. The study relied primarily on self-report measures, making the findings potentially vulnerable to recall bias, social desirability, and participants' subjective interpretation of questionnaire items. Differences in the type of substance used, severity and duration of substance use disorder, previous treatment history, comorbid psychological difficulties, and other clinical characteristics were not examined as potential moderators of treatment response. Furthermore, participants continued to receive routine services from the treatment centers, and the potential influence of these concurrent services could not be completely separated from the effects of the experimental interventions.

Future research should replicate these findings using larger and more heterogeneous samples drawn from multiple treatment settings and geographical regions. Randomized controlled trials with longer follow-up intervals, such as six months or one year, would provide stronger evidence regarding the durability of changes in recovery motivation, self-control, and relapse prevention. Future studies should also examine whether treatment effects differ according to substance type, severity of dependence, duration of use, gender, age, psychiatric comorbidity, and previous relapse history. Incorporating objective indicators such as biological verification of abstinence, treatment retention, documented relapse episodes, and clinician-rated outcomes would strengthen the validity of the findings. Research should also investigate potential mediators of change, including

psychological flexibility, experiential avoidance, emotional awareness, emotion regulation, craving, self-efficacy, and values-based action, in order to clarify why ACT and EFT may produce different effects across treatment outcomes. Comparative studies examining integrated or sequential combinations of EFT and ACT may also be useful for determining whether addressing emotional processing and psychological flexibility within the same treatment program produces stronger or more durable outcomes.

From a practical perspective, addiction treatment centers can consider incorporating both EFT and ACT into comprehensive psychological rehabilitation programs for individuals with substance use disorder. Treatment selection may be guided by the dominant clinical needs of each client. Individuals who show pronounced emotional dysregulation, shame, unresolved emotional experiences, or impulsive behavior under emotional pressure may particularly benefit from emotion-focused interventions, whereas those characterized by experiential avoidance, rigid responses to craving, low commitment to recovery, or difficulty maintaining value-consistent behavior may benefit more strongly from acceptance- and commitment-based interventions. Clinicians may also integrate compatible components of both approaches, such as emotional awareness, acceptance, mindfulness, self-compassion, values clarification, and relapse planning, within individualized treatment programs. Training addiction counselors and psychologists in these approaches may broaden the range of evidence-informed psychosocial services available in outpatient treatment settings and provide clients with practical skills for maintaining recovery outside formal treatment sessions.

Authors' Contributions

All authors contributed substantially to the study and to manuscript development, and all approved the final version.

Declaration

The authors declare that artificial intelligence tools were used only to assist with language editing, translation, and improvement of the manuscript's readability. All conceptualization, study design, data collection, data analysis, interpretation of findings, and final approval of the manuscript were performed by the authors. The authors take

full responsibility for the accuracy, integrity, and originality of the content.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

Acknowledgments

The authors thank the participating centers, clinicians, adolescents, and guardians who made the study possible.

Declaration of Interest

The authors report no conflict of interest.

Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Ethics Considerations

The study placed a high emphasis on ethical considerations. Informed consent obtained from all participants, ensuring they are fully aware of the nature of the study and their role in it. Confidentiality strictly maintained, with data anonymized to protect individual privacy. The study adhered to the ethical guidelines for research with human subjects as outlined in the Declaration of Helsinki.

References

1. Volkow ND, Blanco C. Substance Use Disorders: A Comprehensive Update Of Classification, Epidemiology, Neurobiology, Clinical Aspects, Treatment And Prevention. *World Psychiatry*. 2023;22(2):203-29. [PMID: 37159360] [PMCID: PMC12116982] [DOI]
2. Marlatt GA, Donovan DM. Relapse Prevention: Maintenance Strategies In The Treatment Of Addictive Behaviors. 2nd ed. New York: Guilford Press; 2005.
3. Tangney JP, Baumeister RF, Boone AL. High Self-Control Predicts Good Adjustment, Less Pathology, Better Grades, And Interpersonal Success. *Journal of Personality*. 2004;72(2):271-324. [PMID: 15016066] [PMCID: PMC10208523] [DOI]
4. Stellern J, Xiao KB, Grennell E, Sanches M, Gowin JL, Sloan ME. Emotion Regulation In Substance Use Disorders: A Systematic Review And Meta-Analysis. *Addiction*. 2023;118(1):30-47. [PMID: 35851975] [DOI]
5. Chrétien S, Giroux I, Smith I, Jacques C, Ferland F, Sévigny S. Emotional Regulation In Substance-Related And Addictive Disorders Treatment: A Systematic Review. *Journal of Gambling Studies*. 2025;41:353-448. [PMID: 39918691] [PMCID: PMC12116982] [DOI]
6. Greenberg LS. Emotion-Focused Therapy. Washington, DC: American Psychological Association; 2002. [DOI]
7. Elliott R, Watson JC, Goldman RN, Greenberg LS. Learning Emotion-Focused Therapy: The Process-Experiential Approach To Change. Washington, DC: American Psychological Association; 2004. [DOI]
8. Greenberg LS. Emotion-Focused Therapy: Coaching Clients To Work Through Their Feelings. 2nd ed. Washington, DC: American Psychological Association; 2015. [DOI]
9. Hayes SC, Luoma JB, Bond FW, Masuda A, Lillis J. Acceptance And Commitment Therapy: Model, Processes And Outcomes. *Behaviour Research and Therapy*. 2006;44(1):1-25. [PMID: 16300724] [PMCID: PMC13225531] [DOI]
10. Hayes SC, Strosahl KD, Wilson KG. Acceptance And Commitment Therapy: The Process And Practice Of Mindful Change. 2nd ed. New York: Guilford Press; 2012.
11. Gloster AT, Walder N, Levin ME, Twohig MP, Karekla M. The Empirical Status Of Acceptance And Commitment Therapy: A Review Of Meta-Analyses. *Journal of Contextual Behavioral Science*. 2023;28:181-92. [DOI]
12. Twohig MP, Levin ME. Acceptance And Commitment Therapy As A Treatment For Anxiety And Depression: A Review. *Psychiatric Clinics of North America*. 2017;40(4):751-70. [PMID: 29080598] [DOI]
13. Osaji J, Ojimba C, Ahmed S. The Use Of Acceptance And Commitment Therapy In Substance Use Disorders: A Review Of Literature. *Journal of Clinical Medicine Research*. 2020;12(10):629-33. [PMID: 33029268] [PMCID: PMC7524566] [DOI]
14. Díez-Bejarano L, Chaves C. Is Acceptance And Commitment Therapy Effective In Treating Addiction? A Systematic Review. *Psychiatric Annals*. 2022;52(6):248-60. [DOI]
15. Krotter A, Aonso-Diego G, González-Menéndez A, González-Roz A, Secades-Villa R, García-Pérez Á. Effectiveness Of Acceptance And Commitment Therapy For Addictive Behaviors: A Systematic Review And Meta-Analysis. *Journal of Contextual Behavioral Science*. 2024;32:100773. [DOI]