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Original research

The Comparison of the Effectiveness of Cognitive-Behavioral Therapy with Cognitive-Bbehavioral Coaching on Negative Automatic Thoughts of Women Victims of Domestic Violence

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Abstract

Introduction: Domestic violence is a special type of violence that is applied at the family level and leads to physical, mental, and sexual harm or suffering in women. The purpose of this study was to compare the effectiveness of cognitive-behavioral therapy with cognitive-behavioral coaching on the negative automatic thoughts of women victims of domestic violence.

Research Methods: This semi-experimental study employed a pretest-posttest design with a control group and a 2-month follow-up. In this research, the statistical population was all women who were victims of domestic violence (by their husbands) who referred to counseling centers and psychological services in Tehran in 2022. In the first stage, using the convenience sampling method, 75 people were selected and then randomly divided into 2 experimental groups (each group 25 people) and one control group (25 people). Participants were replaced, and experimental groups underwent cognitive-behavioral therapy and cognitive-behavioral coaching, but the control group received no training and remained on the waiting list. To collect data wife abuse questionnaire of Ghahari and the psychological well-being scale. Data analysis was performed using SPSS-28 software in two sections: descriptive and inferential (analysis of variance with repeated measures and Bonferroni).

Results: The results of the study showed that cognitive-behavioral therapy and cognitive-behavioral coaching in post-test and follow-up had a significant effect on negative automatic thoughts of women victims of domestic violence (P<0.05), and cognitive-behavioral coaching is more effective in negative automatic thoughts of women victims of domestic violence (P<0.05).

Conclusion: Based on the results of the present study, it can be said that cognitive-behavioral therapy and cognitive-behavioral coaching can be used as a treatment method for negative automatic thoughts of women victims of domestic violence, and the priority of use i with cognitive-behavioral therapy.

Keywords: cognitive-behavioral therapy, cognitive-behavioral coaching, domestic violence, negative automatic thoughts

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Introduction:

The family, as a social and emotional unit shaping human personality, is established through the marital bond between a man and a woman (1). The need for connection imbued with intimacy and love is one of the primary reasons driving men and women toward marriage (2). Marriage and family formation represent a significant aspect of human life, contributing to personal growth, fulfillment of various needs, and the overall psychological well-being of couples. Despite these vital functions of marriage and family, marital conflicts (3) and domestic violence remain inherent components of marital relationships (4, 5). Therefore, one of the factors that challenges family health is domestic violence (6), which is carried out with the intention of harming a spouse through psychological, physical, verbal, and economic abuse (7). Violence against women is a major public health concern that affects the physical, sexual, psychological, and social well-being of more than one-third of all women and girls worldwide (8).

In some cases, violence against women may provoke retaliatory reactions from them. However, in most instances, due to the lack of social and familial support, these women experience various psychological and physical harms (9). Domestic violence can also be described as a form of aggression occurring in spousal relationships (10), sometimes referred to as spousal abuse, marital violence, wife abuse, partner abuse, and similar terms (11). Research indicates that negative automatic thoughts are significantly higher in women exposed to violence compared to those who are not. Women subjected to violence often experience negative emotions such as severe anxiety, fear, helplessness, and feelings of worthlessness (12). Negative automatic thoughts refer to recurring, spontaneous thoughts that appear in a person's mind (13). These thoughts not only encompass negative beliefs about oneself but also include perceived threats from others and pessimistic views about the future (14).

According to social cognitive theory, an individual's negative cognitive processing system is generally not active. However, specific life events can trigger rigid core beliefs. Subsequently, the interpretation of these events manifests as numerous negative automatic thoughts, accompanied by painful emotional experiences (such as depressive disorders) (15). Emotional and physical violence, regardless of its form, is undoubtedly a negative experience for everyone, especially women and children, and its long-term effects are often more damaging (16). Under such adverse conditions, negative automatic thoughts may remain persistently activated, fostering negative self-perceptions and insecurity about others and the world (17), which can lead to negative emotions like depression. Tanaka et al. (18) also noted that negative automatic thoughts are typically triggered by adverse events and are characterized by repetition and intrusiveness. Furthermore, intimate partner violence can result in a decline in the psychological well-being of women affected by domestic violence (19). Given the importance of reducing negative automatic thoughts in women who are victims of violence, providing cognitive-behavioral interventions for these women is highly significant (19). Cognitive-behavioral therapy involves improving patients' mood and behavior by addressing distorted cognition, persuasion, demonstration, relaxation training, behavioral training, and other techniques (20). Cognitive-behavioral therapy is a skills-based therapy in which clients learn various techniques to manage and change maladaptive thinking and behavior patterns. The goal of cognitive-behavioral therapy is to enable clients to acquire skills that, when applied consistently, help maintain good mental health (21). In cognitive-behavioral therapy, dysfunctional emotions and behaviors, along

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with maladaptive cognitive processes and themes, are targeted using a range of systematic, explicit, and goal-directed methods (22). In other words, the cognitive-behavioral model works by correcting distorted interpretations, addressing negative self-talk, modifying irrational thought patterns and dysfunctional cognitions, fostering effective coping responses, and regulating negative emotions (23). According to research, cognitive-behavioral therapy has shown significant effectiveness in reducing negative automatic thoughts (24, 25).

On the other hand, cognitive-behavioral therapy is considered the most effective evidence-based form of psychotherapy for various psychological pathologies and life challenges. Over time, the cognitive-behavioral therapy framework has been adapted for other types of interventions, such as counseling, guidance, training, and, more recently, coaching (26). Cognitive-behavioral coaching is a specific approach to coaching that utilizes the conceptual framework of cognitive-behavioral therapy for addressing issues and employs evidence-based tools and techniques (27). Coaching, in general, is defined as the art of facilitating the performance, learning, and growth of others. However, facilitating a client's personal growth by merely following an action plan is often insufficient to help them achieve their goals. What frequently impedes progress are the client's self-limiting or self-defeating thoughts and beliefs (e.g., "I must never make a mistake"), counterproductive behaviors (e.g., inability to make decisions), and distressing emotions (e.g., persistent anxiety). Cognitive-behavioral coaching helps clients identify, examine, and modify such thoughts and beliefs, develop productive behaviors, and enhance emotional management skills. The ultimate goal of cognitive-behavioral coaching is to empower clients to become their own coaches, enabling them to face current and future challenges effectively (28). According to research findings, cognitive-behavioral coaching interventions can help reduce psychological problems. It is considered a promising approach with the potential to significantly expand access to effective and more affordable interventions for managing emotional well-being. Moreover, cognitive-behavioral coaching has shown effectiveness in reducing negative automatic thoughts (29).

The significance and necessity of conducting this research lie in the fact that violence is a highly complex phenomenon that can take various forms within the family, including violence against men (30), children (31), and the elderly (32, 33). However, one of the most common forms of domestic violence is spousal violence, particularly violence against women (34). The perpetration of such violence, in addition to immediate consequences like injury or death, has long-term health implications such as chronic pain, neurological disorders, unintended pregnancies, migraines, depression, bleeding, sexually transmitted infections, HIV, pelvic pain, and more (35). These conditions highlight the need for this study to provide therapeutic interventions aimed at mitigating these issues among women who are victims of domestic violence. Thus, conducting research in this area is both significant and necessary. It can also be stated that the use of cognitive-behavioral therapy and cognitive-behavioral coaching to reduce the problems of women who are victims of domestic violence can be effective. The findings of this research could be utilized in counseling centers and psychological services, where family therapists can apply the results to improve the issues faced by women victims of domestic violence. Counseling and psychological service centers would be among the beneficiaries of this research. Given the above, the research question is: What is the difference in the effectiveness of cognitive-behavioral therapy versus cognitive-behavioral coaching on negative automatic thoughts in women victims of domestic violence?

Research Method:

The research method, based on the objective, is applied, and from the perspective of data collection, it falls under quantitative research and is categorized as quasi-experimental. The study employs a pre-test, post-test design with a control group and a two-month follow-up. The statistical population of this research consisted of all women victims of domestic violence (by their husbands) who referred to counseling and psychological services centers in Tehran in 2022. The sample size was determined using G*Power software. In this software, for comparing the differences between the means of two groups, considering a repeated measures ANOVA test, a significance level of 0.05, a power of 0.95, an average effect size (f = 0/23), and an allocation ratio of 1:1 between the groups, the calculated sample size was 64. Also, considering a 20% loss-to-follow-up, the final sample size was determined to be 75 participants. Specifically, 25 women were assigned to the cognitive-behavioral therapy group, 25 to the cognitive-behavioral coaching group, and 25 to the control group. Inclusion criteria included scoring 88 or higher on the Domestic Violence Questionnaire, absence of physical and psychological illnesses, and having at least a high school diploma. Exclusion criteria included the use of psychiatric or psychoactive drugs, missing two therapy sessions, simultaneous participation in other courses or therapeutic interventions, and substance abuse or smoking. Data analysis was conducted using repeated measures ANOVA with the "Bonferroni post-hoc test." Additionally, SPSS software version 28 was used for data analysis.

Research Instruments

The Wife Abuse Questionnaire (WAQ) was developed by Ghahhari and colleagues (36). It consists of 44 items that measure three components: Psychological abuse with items 1, 2, 3, 4, 5, 6, 7, 8, 8, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 and 20, physical abuse with items 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33 and 34 and sexual abuse with items 35, 36, 37, 38, 39, 40, 41, 42, 43 and 44. The questionnaire uses a 4-point Likert scale for scoring, with never = 1 point, sometimes = 2 points, often = 3 points, and always = 4 points. The reliability of the questionnaire was assessed using Cronbach's alpha, yielding a coefficient of 0.92. Furthermore, the developers evaluated its validity through test-retest reliability, obtaining a correlation coefficient of 0.98 (36). In another study, the test-retest reliability coefficient was reported as 0.98 (37). The content and face validity of the questionnaire were confirmed by professors of psychiatry and psychology. Its reliability was examined using Cronbach's alpha, with a total coefficient of 0.94, and specific coefficients for psychological abuse (0.98), physical abuse (0.96), and sexual abuse (0.98) (38). In another study, the Cronbach's alpha coefficient was 0.92, and the test-retest reliability coefficient was 0.98 (39). In the present study, Cronbach's alpha was used to assess reliability, yielding coefficients of 0.71 in the pre-test, 0.80 in the post-test, and 0.91 in the follow-up.

The Automatic Thoughts Questionnaire (ATQ) was developed by Hollon and Kendall (40). It consists of 30 items and measures two general factors: the frequency of automatic thoughts and the level of belief in these automatic thoughts. The frequency of automatic thoughts is scored on a 5-point Likert scale as follows: "never" (1 point), "sometimes" (2 points), "often" (3 points), "most of the time" (4 points), and "always" (5 points). The level of belief in automatic thoughts is also scored on a 5-point scale: "not at all" (1 point), "To some extent" (2 points), "quite a bit" (3 points), "A great deal" (4 points), and "absolutely" (5 points). This questionnaire evaluates five components: thought assessment (items 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10), positive self-evaluation (items 11, 12, 13, 14, 15

and 16), others' evaluation of self (items 17, 18, 19 and 20), positive future expectations (items 21 and 22) and positive social functioning (items 23, 24, 25, 26, 27, 28, 29 and 30). The Cronbach's alpha coefficient for the questionnaire was found to be 0.92 for frequency and 0.95 for belief (41). The convergent validity of the ATQ was examined using the Beck Depression Inventory, with internal correlation coefficients ranging from 0.40 to 0.70, indicating the divergent validity of the ATQ (42). In another study, reliability was assessed using Cronbach's alpha, yielding a coefficient of 0.92 (43). In the current study, Cronbach's alpha was also employed to assess reliability, with coefficients of 0.91 in the pre-test phase, 0.72 in the post-test phase, and 0.85 during follow-up.

Therapy Sessions

Table 1. Cognitive-Behavioral Therapy Sessions Adapted from Kendall (44)

Sessions	Goals and Session Content
1	Introduction and Familiarization of Participants, Providing Information about cognitive-behavioral therapy, and Explaining Confidentiality Principles.
2	Familiarity with concepts of thoughts, emotions, behaviors, and their differences; explanation of dysfunctional thinking styles; identification of common cognitive distortions.
3	Reconstruction of thoughts
4	Signs and chains, examination of the cause-response-consequence chain, explanation of how consequences fit into a larger behavioral chain.
5	Assertiveness, definition of assertive behavior, and imagining a challenging situation to demonstrate assertive behavior.
6	Impulsivity, self-control, and mood enhancement, definition of impulse, discussion on impulse management, and strategies for better self-control.
7	Stress management and problem-solving, explanation of stress, stress management, problem-solving strategies, and training in muscle relaxation.
8	Sensitization to self-esteem indicators, explanation of how low self-esteem results from negative self-evaluations.

Table 2. Cognitive-Behavioral Coaching Sessions Adapted from Ninan and Palmer (45)

Sessions	Goals and Session Content
1	Teaching the method of understanding and controlling life's problems, the relationship between cognition, emotion, and behavior, goal setting, and recording life events.
2	Motivational interviewing and strengthening the therapist-client alliance; formulation of participants' problems within the framework of the motivational-cognitive model, use of behavioral activation techniques, and reframing automatic thoughts related to women's marital life.
3	Using Socratic questioning in the coaching process, continuing work with automatic thoughts, reviewing the records of dysfunctional thoughts related to marital life, and challenging these automatic thoughts.

4	Re-identifying core beliefs and how they are activated in specific situations, using the downward arrow technique, and examining the participants' target issues.
5	Focusing on understanding and strengthening resilience in coping with domestic violence, enhancing positive self-talk, and using behavioral techniques to replace negative thoughts with positive ones.
6	Cognitive coaching of stress and its relationship with marital performance is the focus of cognitive-behavioral coaching intervention, using cognitive-behavioral techniques in assertiveness training, problem-solving, and teaching marital skills.
7	Mindfulness-based cognitive-behavioral coaching: identifying dysfunctional core beliefs about marital relationships, weakening core beliefs by questioning them using Socratic questioning, and rating negative beliefs on a scale.
8	Teaching how to create and strengthen a cognitive-behavioral coaching culture in the marital life process; training and practicing problem-solving skills and courageous behaviors, teaching relapse prevention techniques, and preparing for the application of learned methods in the future.

Findings

The purpose of this study was to compare the effectiveness of cognitive-behavioral therapy with cognitive-behavioral coaching on the negative automatic thoughts of women victims of domestic violence. Data analysis was performed using SPSS-28 software in two sections: descriptive and inferential (analysis of variance with repeated measures and Bonferroni). Before presenting the inferential results, demographic characteristics were examined, and the results indicated that the mean and standard deviation of the age of the cognitive-behavioral therapy group were 33.44 and 5.975; the mean and standard deviation of the age of the cognitive-behavioral coaching group were 34.88 and 4.825; the mean and standard deviation of the age of the control group were 34.12 and 4.431. The F statistic obtained from comparing the means of the 3 groups in the age variable was F = 0.409, which is not statistically significant (sig = 0.615), indicating that the 3 groups are similar in terms of age. Table 4 shows the frequency and percentage of education of the sample. The Chi-square analysis statistic obtained from comparing the mean age of the 3 groups in the age variable is Chi-Square = 1.754, which is not statistically significant (sig = 0.988), indicating that the three groups are similar in terms of education. Table 5 shows the mean and standard deviation of negative automatic thoughts in the experimental and control groups. Table 3 shows the mean and standard deviation of negative automatic thoughts in the experimental and control groups.

Table 3: Mean and standard deviation of negative automatic thoughts in experimental and control groups

Variables	Stage	mean			standard deviation		
		CBT	CBC	control	CBT	CBC	control
thought assessment	pre-test	35.04	35.40	35.36	.735	1.000	.995
	post-test	29.76	31.16	35.16	1.268	1.772	1.214
	follow up	29.88	31.20	35.20	1.424	1.780	1.225
positive self-evaluation	pre-test	23.40	23.40	23.40	.816	.816	.816
	post-test	20.40	20.92	23.32	.645	.909	.945
	follow up	20.48	20.96	23.36	.823	.935	.907
others' evaluation of self	pre-test	11.76	15.00	14.80	.879	.707	.866
	post-test	11.28	11.36	14.68	1.208	.810	.900
	follow up	11.32	11.40	14.72	1.282	.866	.936
expectations	pre-test	4.84	5.20	5.20	.800	.816	.764
	post-test	3.20	3.56	5.12	.816	.821	.833
	follow up	3.28	3.60	5.16	.891	.866	.850
positive social functioning	pre-test	30.80	30.84	30.84	.943	.943	.943
	post-test	24.64	26.80	30.60	1.251	2.021	1.190
	follow up	24.72	26.80	30.56	1.400	2.030	1.227
total negative automatic thoughts	pre-test	108.88	109.84	109.60	1.943	2.249	1.708
	post-test	89.28	93.80	108.88	2.189	2.136	2.789
	follow up	89.68	93.96	109.00	2.704	2.951	2.843

Table 3 shows the mean and standard deviation of negative automatic thoughts. After checking the statistical assumptions of repeated analysis of variance, this test was used to analyze the collected data. In order to know whether these changes obtained in the post-test and follow-up are statistically significant or not, repeated-measures analysis of variance was used. The use of this test requires compliance with some basic assumptions; these assumptions include the normality of the distribution of scores and the homogeneity of variances, which were checked first. The Shapiro-Wilks test was used to check normality. Since the values of the Shapiro-Wilks test were not significant in any of the stages ($P<0.05$), it can be concluded that the distribution of scores is normal. Levine's test was also used to check the homogeneity of variances. According to the results, the index of Levin's test was not statistically significant in three stages of evaluation ($P<0.05$) and thus the assumption of equality of variances was confirmed. The research data did not question the assumption of homogeneity of variance-covariance matrices (Box's Test of Equality of Covariance Matrices); Therefore, this assumption has also been met ($P>0.05$). The significance level of the interaction effect of group and pre-test was greater than 0.05, and this indicated the homogeneity of the slope of the regression line. Considering that the assumptions of using variance analysis with repeated measurements have been

met, this statistical test can be used. Since the significance level of Mauchly's Test of Sphericity for negative automatic thoughts is 0.001, the results are shown in Table 4.

Table 4: Mauchly's Test of Sphericity for negative automatic thoughts

Variables	Mauchly's W	Approx. Chi-Square	df	Sig	Epsilon	
					Greenhouse-Geisser	Huynh-Feldt
thought assessment	.223	106.627	2	.001	.610	.644
positive self-evaluation	.190	118.046	2	.001	.630	.682
others' evaluation of self	.097	165.789	2	.001	.580	.650
expectations	.242	100.782	2	.001	.710	.662
positive social functioning	.044	222.005	2	.001	.662	.661
total automatic thoughts	.161	129.608	2	.001	.611	.640

Based on the results of Table 4, it shows that Mauchly's Test of Sphericity for negative automatic thoughts is significant at the level of 0.001 (P value is smaller than 0.050). This finding indicates that the variance of the differences between the levels of the dependent variables is significantly different. The assumption of the variance analysis of sphericity is not respected. Violation of the default assumption of sphericity causes the F statistic of variance analysis to be inaccurate. To solve this problem and increase the accuracy of the F statistic, the degrees of freedom are corrected using the Greenhouse-Geisser and Huynh-Feldt methods. Which correction method to use, according to the suggestion of Stevens (1996; cited 46), if the epsilon value is greater than 0.75, then Huon-Flat correction, and if epsilon is smaller than 0.75, or there is no information about sphericity. Greenhouse-Geisser correction is used. In the present study, the epsilon value for the Greenhouse-Geyser index for negative automatic thoughts is smaller than 0.75, so Greenhouse-Geyser epsilon was used. Therefore, taking into account the Greenhouse-Geisser correction, the results of the analysis of variance test with repeated measurements are reported in Table 5 to investigate the difference of the research sample in the three stages of pre-test, post-test, and follow-up of the negative automatic thoughts variable.

Table 5. Results of tests of within-subjects effects and tests of within-subjects contrasts (Greenhouse-Geisser correction) of negative automatic thoughts

Variables	Source	F	Sig	Partial Eta	Observed Powera
thought assessment	group	68.968	.0001	.657	.999
	factor	419.395	.001	.853	.999
	factor * group	96.797	.001	.729	.999
positive self-evaluation	group	56.196	.008	.610	.999
	factor	224.251	.001	.757	.999
	factor * group	53.815	.001	.599	.999

others' evaluation of self	**group**	61.930	.008	.632	.999
	factor	378.399	.001	.840	.999
	factor * group	86.982	.001	.707	.999
expectations	**group**	26.916	.002	.428	.999
	factor	97.800	.001	.576	.999
	factor * group	21.815	.001	.377	.999
positive social functioning	**group**	73.908	.001	.672	.999
	factor	631.735	.001	.834	.999
	factor * group	88.621	.001	.711	.999
total negative automatic thoughts	**group**	251.119	.001	.875	.999
	factor	1370.130	.001	.750	.999
	factor * group	315.253	.001	.798	.999

The results of Table 5 showed that cognitive-behavioral therapy and cognitive-behavioral coaching have a significant effect on improving the quality of sleep. In the following, the two-by-two comparison of the pairwise comparisons of the test stages (pre-test, post-test, and follow-up) on the improvement of negative automatic thoughts to check the durability of the results in the follow-up stage is given in Table 6.

Table 6. Benferoni post hoc test results of negative automatic thoughts to study the stability of the results

Variables	Stage	pairwise comparisons	mean difference	stage difference	Sig
thought assessment	**pre-test**	35.267	pretest-posttest	3.240	.001
	post-test	32.027	pretest-follow up	3.173	.001
	follow up	32.093	posttest -follow-up	-0.067	.408
positive self-evaluation	**pre-test**	23.400	pretest-posttest	1.853	.001
	post-test	21.547	pretest-follow up	1.800	.001
	follow up	21.600	posttest -follow-up	-0.053	.321
others' evaluation of self	**pre-test**	14.853	pretest-posttest	2.413	.001
	post-test	12.440	pretest-follow up	2.373	.001
	follow up	12.480	posttest -follow-up	-0.040	.263
expectations	**pre-test**	5.080	pretest-posttest	1.120	.001
	post-test	3.960	pretest-follow up	1.067	.001
	follow up	4.013	posttest -follow-up	-0.053	.321

positive social functioning	pre-test	30.840	pretest-posttest	3.493	.001
	post-test	27.347	pretest-follow up	3.480	.001
	follow up	27.360	posttest -follow-up	-0.013	.999
total negative automatic thoughts	pre-test	109.440	pretest-posttest	12.120	.001
	post-test	97.30	pretest-follow up	11.893	.001
	follow up	97.547	posttest -follow-up	-0.227	.063

Based on the results of Table 6, cognitive-behavioral therapy and cognitive-behavioral coaching improved negative automatic thoughts and their dimensions in the post-test stage, and their therapeutic effects were lasting and stable after 2 months. Table 7 shows the results of the follow-up test of the negative automatic thoughts, to investigate a more effective treatment.

Table 7. Benferroni post hoc test results to investigate a more effective treatment

Variables	Group	pairwise comparisons	treatment difference	mean difference	Sig
thought assessment	CBT	31.560	CBT - CBC	-1.027	.007
	CBC	32.587	CBT - control	-3.360	.001
	Control	35.240	CBC - control	-2.653	.001
positive self-evaluation	CBT	21.427	CBT - CBC	-0.333	.275
	CBC	21.760	CBT - control	-1.933	.001
	Control	23.360	CBC - control	-1.600	.001
others' evaluation of self	CBT	12.453	CBT - CBC	-0.133	.999
	CBC	12.587	CBT - control	-2.280	.001
	Control	14.733	CBC - control	-2.147	.001
expectations	CBT	3.773	CBT - CBC	-0.347	.247
	CBC	4.120	CBT - control	-1.387	.001
	Control	5.160	CBC - control	-1.040	.001
positive social functioning	CBT	26.733	CBT - CBC	-1.413	.001
	CBC	28.147	CBT - control	-1.933	.001
	Control	30.667	CBC - control	-2.520	.001
total negative automatic thoughts	CBT	95.947	CBT - CBC	-3.253	.001
	CBC	99.200	CBT - control	-13.213	.001
	Control	109.160	CBC - control	-9.960	.001

According to Table 7, the results showed that the average difference between the cognitive-behavioral therapy group and the control group is greater than the average difference between the cognitive-behavioral coaching group and the control group, which indicates that cognitive-behavioral therapy is more effective than cognitive-behavioral coaching on negative automatic thoughts.

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Discussion and Conclusion:

This study aimed to compare the effectiveness of cognitive-behavioral therapy and cognitive-behavioral coaching on negative automatic thoughts in women who are victims of domestic violence. The results showed that both cognitive-behavioral therapy and coaching had a significant impact on reducing negative automatic thoughts, and this effect persisted during the follow-up phase. This finding is consistent with the results of Kaplan et al. (24). No contradictory findings were identified. To explain this result, it can be said that domestic violence is a longstanding social issue with a broad impact. As a result, the diagnosis and treatment of this phenomenon have always been a focus for therapists (47). Similar to physical injuries, violence inflicts destructive psychological damage on female victims of domestic violence. Women who experience violence regularly exhibit severe symptoms of depression, anxiety, and post-traumatic stress disorder, which can lead to negative automatic thoughts. According to research, cognitive-behavioral therapy can significantly reduce the level of maladaptive attitudes and irrational beliefs in individuals (48). Additionally, through the use of cognitive-behavioral strategies, attempts are made to identify irrational and maladaptive thoughts that trigger anxiety, depression, and especially negative automatic thoughts. The individual in therapy gains insight into the role of these thoughts and, with participation, tries to replace them with rational and positive thoughts. With the help of behavioral strategies such as relaxation techniques, anxiety, distress, and consequently negative automatic thoughts can be reduced. In fact, one of the reasons for this result is the application of cognitive-behavioral methods such as relaxation and mental imagery, which were taught to female victims of domestic violence during therapy sessions. Therefore, it is logical that cognitive-behavioral therapy is effective in reducing negative automatic thoughts in female victims of domestic violence. Furthermore, the results demonstrated that cognitive-behavioral coaching had a significant impact on reducing negative automatic thoughts, and this effect persisted during the follow-up phase. This finding is consistent with the results of Jones and colleagues (29). No contradictory findings were identified.

To explain this result, it can be said that when individuals think about a situation, it influences how they feel about that situation. In other words, when individuals have control over their thoughts, they will subsequently control their emotions as well. The tools and methodology used in cognitive-behavioral therapy are equally applied in non-clinical areas, such as lack of motivation, issues related to self-confidence, and the development of professional, personal, and general skills. The goal of cognitive-behavioral coaching is to identify the root of a problem that prevents an individual from reaching their full potential. A core belief of cognitive-behavioral coaching is that deficiencies and behavioral abnormalities stem from faulty cognitions and misinterpretations of the world around us. Once the cause of a problem has been identified, the next priority is to determine the necessary actions to control and resolve the problem by changing the individual's belief system in response to the event or situation. Cognitive-behavioral coaching focuses on the idea that our reactions are influenced by our beliefs about an event rather than our reactions being directly caused by the event itself. It can also be said that by focusing on and separating thoughts, beliefs, and negative automatic thoughts about events, it is more likely to employ alternative perspectives and behaviors, ultimately changing our attitudes, beliefs, and negative automatic thoughts. Therefore, cognitive-behavioral coaching plays a significant role in solving problems such as hesitation, procrastination, impatience, lack of self-confidence, and courage, which help women who are victims of domestic violence

experience fewer negative automatic thoughts. Therefore, it is logical that cognitive-behavioral coaching is effective in reducing negative automatic thoughts in female victims of domestic violence. Ultimately, the results showed that the mean difference between cognitive-behavioral therapy and the control group was greater than the mean difference between the cognitive-behavioral coaching intervention and the control group. This indicates that the cognitive-behavioral therapy intervention was more effective than the cognitive-behavioral coaching intervention in reducing negative automatic thoughts. No research has shown that cognitive-behavioral therapy intervention is more effective than cognitive-behavioral coaching intervention in reducing negative automatic thoughts, so the consistency or inconsistency of this result with previous research is unclear. To explain this result, it can be said that one of the techniques of cognitive-behavioral therapy is cognitive restructuring, which is a useful technique for understanding unpleasant feelings and moods. This method helps clients challenge the often-inaccurate beliefs that are automatically generated in their minds and lead to negative emotions and hasty, irrational reactions. Cognitive restructuring is a set of techniques that teaches individuals to examine their assumptions about situations and the world and to make their beliefs more realistic and rational. In using these techniques, it is believed that irrational thoughts lead to irrational behaviors, which can be corrected by changing the underlying thoughts. Cognitive restructuring means that every individual can easily change their thoughts. Cognitive restructuring begins with the fundamental assumption that problems in life arise from the faulty cognitions, beliefs, and thoughts that individuals develop in various situations. Therefore, cognitive therapists, instead of focusing on external, environmental, genetic, and hereditary factors, and childhood events, focus on thought, cognitive modification, and interpretation of the individual, and making their perception rational and well-founded (49). Another cognitive-behavioral method is relaxation techniques, which is based on progressive relaxation, relying on coordinated tensing and relaxing, starting from the feet and spreading throughout the body. In progressive muscle relaxation, the individual learns to gradually tense each muscle of their body for about 15-20 seconds and then relax the muscle for about 20-30 seconds. In breathing relaxation techniques, the individual tries to inhale a large amount of air into their lungs during inhalation and then hold their breath for about 5-10 seconds, and then slowly exhale the air through their nose and pay attention to the feeling of relaxation. Therapists believe that relaxation techniques are more suitable for individuals with anxiety disorders; however, they can also be effective in reducing psychological problems. Ultimately, it can be said that since cognitive-behavioral therapy is the best form of evidence-based psychotherapy for various types of psychopathology and life problems, over time, cognitive-behavioral therapy has been adapted for other types of interventions, such as coaching (mentoring), and coaching therapy has emerged based on cognitive-behavioral therapy (26). For this reason, it may be more effective than coaching. Therefore, it is logical that there is a significant difference in the effectiveness of cognitive-behavioral therapy and cognitive-behavioral coaching in reducing negative automatic thoughts in female victims of domestic violence, and cognitive-behavioral therapy is more effective than cognitive-behavioral coaching in reducing negative automatic thoughts in female victims of domestic violence.

Limitations of the Research: In this study, the statistical population included women who were victims of domestic violence (by their husbands) and referred to counseling and psychological service centers in Tehran. Therefore, caution should be exercised when generalizing the results to

similar populations in other cities and cultures. Due to time constraints, this study could not conduct a longer-term follow-up phase to examine the persistence and sustainability of the effects of cognitive-behavioral therapy and cognitive-behavioral coaching. Instead, it relied on a single two-month follow-up assessment. Since the follow-up phase in this study was limited to two months, it is recommended that future studies include longer follow-up phases (over six months or even up to a year) to evaluate the long-term effects of cognitive-behavioral therapy and cognitive-behavioral coaching on reducing negative automatic thoughts and addressing the issues of women who are victims of domestic violence. As this study was limited to women who were victims of domestic violence, it is suggested that future research also include male participants, as gender may play a determining role in the outcomes of such studies. Additionally, researching to compare the effectiveness of cognitive-behavioral therapy and cognitive-behavioral coaching with other therapeutic approaches could yield valuable results in improving the problems of women affected by domestic violence and spousal abuse.

Application of the Research: Since cognitive-behavioral coaching leads to a reduction in negative automatic thoughts among women who are victims of domestic violence, it is recommended that psychologists, clinical counselors, and family therapists use this therapeutic approach to reduce negative emotions and improve the automatic thoughts of their clients, particularly women who are victims of domestic violence.

Ethical Considerations: Ethical approval was obtained from the Research Ethics Committee of the University of Mazandaran under the code IR.UMZ.REC.1401.032. The ethical principles adhered to in this study included maintaining privacy and respecting the rights of participants, explaining the study process to them, informing them of the research objectives, answering their questions, providing results to participants upon request, and offering intensive therapeutic sessions to the control group after the follow-up period.

Reference:

1. Bean RC, Ledermann T, Higginbotham BJ, Galliher RV. Associations between relationship maintenance behaviors and marital stability in remarriages. Journal of divorce & remarriage. 2020; 61(1): 62-82. https://doi.org/10.1080/10502556.2019.1619385

2. Vowels LM, Mark K P. Partners' Daily Love and Desire as Predictors of Engagement in and Enjoyment of Sexual Activity. Journal of Sex & Marital Therapy, 2020; 1(1): 1-13. https://doi.org/10.1080/0092623X.2019.1711274

3. Dinmohaamadpour M, Tavanaei S, Kabiri E, Hajiyousefi E, Beki Ardekani E, Mohebian M. The Effectiveness of Systemic Family Therapy on Marital Conflicts and Marital Burnout of Couples. Iranian Evolutionary Educational Psychology Journal, 2024; 6(2): 157-169. http://ieepj.hormozgan.ac.ir/article-1-861-en.html

4. Kim B, Royle M. Domestic violence in the context of the COVID-19 pandemic: a synthesis of systematic reviews. Trauma, Violence, & Abuse, 2024; 25(1): 476-493. https://doi.org/10.1177/15248380231155530

5. MacRae A, Kertesz M, Gavron T. Therapeutic interventions with women and children in domestic violence shelters: A systematic scoping review. Children and Youth Services Review, 2024; 1(1): 1-10. https://cris.haifa.ac.il/en/publications/therapeutic-interventions-with-women-and-children-in-domestic-vio

6. Ojha M, Babbar K. Power to choose? Examining the link between contraceptive use decision and domestic violence. Economics & Human Biology, 2024; 55(1): 1-10. https://doi.org/10.1016/j.ehb.2024.101416

7. Postmus JL, Hoge GL, Breckenridge J, Sharp-Jeffs N, Chung D. Economic abuse as an invisible form of domestic violence: A multicounty review. Trauma, Violence, & Abuse, 2020; 21(2): 261-283. https://doi.org/10.1177/1524838018764160

8. Chernet AG, Cherie KT.. Prevalence of intimate partner violence against women and associated factors in Ethiopia. BMC women's health, 2020; 20(1): 1-7. https://doi.org/10.1186/s12905-020-0892-1

9. Amaral S, Dahl GB, Endl-Geyer V, Hener T, Rainer H. Deterrence or backlash? Arrests and the dynamics of domestic violence. 2023; 1-49. https://www.nber.org/system/files/working_papers/w30855/w30855.pdf

10. Stokes CM, Alonso J, Andrade LH, Atwoli L, Cardoso G, Chiu WT, Dinolova RV, Gureje O, Karam AN, Karam EG, Kessler RC. Pre-marital predictors of marital violence in the WHO World Mental Health (WMH) Surveys. Social psychiatry and psychiatric epidemiology. 2020; 55(1): 393-405. https://doi.org/10.1007/s00127-019-01703-z

11. Ali P, McGarry J, Bradbury-Jones C. Domestic Violence and Abuse: Theoretical Explanation and Perspectives. In Domestic Violence in Health Contexts: A Guide for Healthcare Professions (pp. 17-33). Springer, Cham. 2022. https://doi.org/10.1007/978-3-030-29361-1_2

12. Bilgin Z, Karaca S, Pasinlioğlu T. Investigation of relationship with automatic thoughts and the status of women's exposure to violence by adolescents children Kadınların ergen çocukları tarafından şiddete maruz bırakılma durumu ve otomatik düşünceler ile ilişkisinin incelenmesi. Journal of Human Sciences, 2014; 11(1): 965-978. https://www.j-humansciences.com/ojs/index.php/IJHS/article/view/2679

13. Buschmann T, Horn RA, Blankenship VR, Garcia YE, Bohan, KB. The relationship between automatic thoughts and irrational beliefs predicting anxiety and depression. Journal of Rational-Emotive & Cognitive-Behavior Therapy, 2018; 36(1): 137-162. https://link.springer.com/article/10.1007/s10942-017-0278-y

14. Yu M, Lv F, Liu Z, Gao D. How negative automatic thoughts trigger Chinese adolescents' social anxiety: The mediation effect of meta-worry. Current Psychology, 2022; 1(1): 1-10. http://dx.doi.org/10.1007/s12144-022-03229-1

15. Beck AT, Brown G, Steer RA, Eidelson JI, Riskind JH. Differentiating anxiety and depression: a test of the cognitive content-specificity hypothesis. Journal of Abnormal Psychology, 1987; 96(3): 179-183. https://doi.org/10.1037//0021-843x.96.3.179

16. Zhang R, Xie R, Ding W, Wang X, Song S, Li W. Why is my world so dark? Effects of child physical and emotional abuse on child depression: The mediating role of self-compassion and negative automatic thoughts. Child Abuse & Neglect, 2022; 129(1): 1-10. https://doi.org/10.1016/j.chiabu.2022.105677

17. Bakker AB, Van Der Zee KI, Lewig KA, Dollard MF. The relationship between the big five personality factors and burnout: A study among volunteer counselors. The Journal of Social Psychology, 2006; 146(1): 31-50. https://doi.org/10.3200/socp.146.1.31-50

18. Tanaka M, Wekerle C, Schmuck, ML, Paglia-Boak A, MAP Research Team. The linkages among childhood maltreatment, adolescent mental health, and self-compassion in child welfare adolescents. Child abuse & neglect, 2011; 35(10): 887-898. https://doi.org/10.1016/j.chiabu.2011.07.003

19. Hultmann O, Broberg AG, Axberg U. A randomized controlled study of trauma-focused cognitive behavioural therapy compared to enhanced treatment as usual with patients in child mental health care traumatized from family violence. Children and Youth Services Review, 2023; 144(2): 1-10. https://doi.org/10.1016/j.childyouth.2022.106716

20. Furukawa Y, Sakata M, Yamamoto R, Nakajima S, Kikuchi S, Inoue M, Perlis M. Components and delivery formats of cognitive behavioral therapy for chronic insomnia in adults: a systematic review and component network meta-analysis. JAMA psychiatry, 2024; 1(1): 1-10. https://doi.org/10.1001/jamapsychiatry.2023.5060

21. Johnco CJ, Zagic D, Rapee RM, Kangas M, Wuthrich VM. Long-term remission and relapse of anxiety and depression in older adults after Cognitive Behavioral Therapy (CBT): A 10-year follow-up of a randomized controlled trial. Journal of Affective Disorders, 2024; 358(1): 440-448. https://doi.org/10.1016/j.jad.2024.05.033

22. Marcotte-Beaumier G, Bouchard S, Gosselin P, Langlois F, Belleville G, Marchand A, Dugas MJ. The Role of Intolerance of Uncertainty and Working Alliance in the Outcome of Cognitive Behavioral Therapy for Generalized Anxiety Disorder Delivered by Videoconference: Mediation Analysis. JMIR Mental Health, 2021; 8(3): 25-36. https://doi.org/10.2196/24541

23. Mayhami K, Moradi O, Dadgar M, Ezatpour EE. Investigation of the educational effectiveness of the cognitive-behavioral approach (CBT) coupled with relaxation on migraine pain. Shenakht Journal of Psychology and Psychiatry 2019; 6 (2): 27-37. http://dx.doi.org/10.29252/shenakht.6.2.27

24. Kaplan V, Düken ME, Kaya R, Almazan J. Investigating the effects of cognitive-behavioral-therapy-based psychoeducation program on university students' automatic thoughts, perceived stress, and self-efficacy levels. Journal of Research and Health, 2023; 13(2): 87-98. http://dx.doi.org/10.32598/JRH.13.2.2125.1

25. Demir S, Ercan F. The effectiveness of cognitive behavioral therapy-based group counseling on depressive symptomatology, anxiety levels, automatic thoughts, and coping ways among Turkish nursing students: A randomized controlled trial. Perspectives in Psychiatric Care, 2022; 58(4): 2394-2406. https://onlinelibrary.wiley.com/doi/abs/10.1111/ppc.13073

26. Lungu A, Boone MS, Chen SY, Chen CE, Walser RD. Effectiveness of a cognitive behavioral coaching program delivered via video in real-world settings. Telemedicine and e-Health, 2021; 27(1): 47-54. https://doi.org/10.1089/tmj.2019.0313

27. Tomoiagă C, David O. Is cognitive-behavioral coaching an empirically supported approach to coaching? A meta-analysis to investigate its outcomes and moderators. Journal of Rational-Emotive & Cognitive-Behavior Therapy, 2023; 41(2): 489-510. https://doi.org/10.1007/s10942-023-00498-y

28. Neenan M. From cognitive behavior therapy (CBT) to cognitive behavior coaching (CBC). Journal of Rational-Emotive & Cognitive-Behavior Therapy, 2008; 26(1): 3-15. https://doi.org/10.1007/s10942-007-0073-2

29. Jones JK, Turner MJ, Barker JB. The effects of a cognitive–behavioral stress intervention on the motivation and psychological well-being of senior UK police personnel. International Journal of Stress Management. 2021; 28(1) :46-56. https://psycnet.apa.org/doi/10.1037/str0000218

30. Ringin L, Robinson M, Greville H, Papertalk L, Thompson S. Men Against Violence: Engaging men and boys in prevention of family violence. Health Promotion Journal of Australia, 2021; 32(2): 322-325. https://doi.org/10.1002/hpja.343

31. Peterman A, Potts A, O'Donnell M, Thompson K, Shah N, Oertelt-Prigione S, Van Gelder N. Pandemics and violence against women and children (Vol. 528). Washington, DC: Center for Global Development. 2020. https://www.cgdev.org/sites/default/files/pandemics-and-vawg-april2.pdf

32. Lowenstein A, Naim SP. Coping with Elder Abuse in Israel: The Multi-systemic Model. In International Handbook of Elder Abuse and Mistreatment (pp. 335-347). Springer, Singapore. 2020. https://doi.org/10.1007/978-981-13-8610-7_19

33. Valido S, Do Carmo Caldeira E, Mendes F. Burnout Among Formal Caregivers and Risk of Violence Against Institutionalized Elderly. In Handbook of Research on Health Systems and Organizations for an Aging Society (pp. 247-262). IGI Global. 2020. https://dspace.uevora.pt/rdpc/bitstream/10174/33286/1/Burnout%20Among%20Formal%20Caregivers%20and%20Risk%20of%20Violence.pdf

34. McIlwaine C, Evans Y. Urban Violence Against Women and Girls (VAWG) in transnational perspective: reflections from Brazilian women in London. International Development Planning Review, 2020; 42(1): 93-112. https://doi.org/10.3828/idpr.2018.31

35. Porzoor P, Abbasi M, Shojaei A. The Effectiveness of Spiritual Intervention on Personal and Social Resiliency of Women Victims of Domestic Violence. Journal of Clinical Psychology, 2018; 10(2): 95-105. https://doi.org/10.22075/jcp.2018.12744.1250

36. Ghahari S, Âtefvahid M, Yousefi H. The prevalence of Spouse Abuse Among Married Students of Islamic Azad University of Tonekabon in 1383. J Mazandaran Univ Med Sci 2006; 15 (50): 83-89. http://jmums.mazums.ac.ir/article-1-717-fa.html

37. Sotode Navarodi S, ZainAli S, Khasteganan N. The relationship between spousal abuse, social support, and perceived stress in women with addicted and non-addicted husbands in Rasht. Jame Nagar Nursing and Midwifery, 2011; 22(68), 25-32. https://www.sid.ir/journal/285/fa

38. Karami H, Khakbaz H, Sohrabi F, Barati-Sedeh F, Farhadi M H. Effectiveness of Cognitive-Behavioral Group Therapy for Anger Management in Reducing Wife Abuse and Increasing Marital Satisfaction in Patients with Substance Abuse. jrehab 2014; 14 (1): 91-99. http://rehabilitationj.uswr.ac.ir/article-1-1465-fa.html

39. Panaghi L, Pirozi D, Maleki G, Shirin Bayan M, Bagheri F. A Study on the Relationship between Romantic Attachment Styles. Journal of Family Research, 2012; 8(1): 19-31. https://jfr.sbu.ac.ir/article_96085_f2b18214c29d99136b47ced9bac4e1f2.pdf?lang=en

40. Hollon S, Kendall P. Cognitive self-statements in depression: Development of an automatic thoughts questionnaire. Cognitive Therapy and Research, 1980; 4(4): 383–395. https://doi.org/10.1007/BF01178214

41. BaBamiri M, Vatankhah M, Masumi Jahandizi H, Nemati M, Darvishi M. The Relationship between Coping Styles, Negative Automatic Thoughts, and Hope with Happiness in Addicts of Ahvaz Drug Abuse Rehabilitation Clinics in 2011. J Adv Med Biomed Res 2013; 21 (84): 82-91. https://journal.zums.ac.ir/article-1-2075-fa.html

42. Rana M, Sthapit S, Sharma VD. Assessment of Automatic Thoughts in Patients with Depressive Illness at a Tertiary Hospital in Nepal. JNMA; Journal of the Nepal Medical Association, 2017; 56(206): 248-258. https://pubmed.ncbi.nlm.nih.gov/28746324/

43. Popa CO, Rus AV, Lee WC, Cojocaru C, Schenk A, Văcăraș V, Bredicean C. The Relation between Negative Automatic Thoughts and Psychological Inflexibility in Schizophrenia. Journal of Clinical Medicine, 2022; 11(3): 871-888. https://doi.org/10.3390/jcm11030871

44. Kendall PC. Child and adolescent therapy: Cognitive-behavioral procedures. Guilford Press. 2011. https://books.google.com/books?

45. Neenan M, Palmer S, editors. Cognitive behavioral coaching in practice: An evidence-based approach. Routledge; 2021. https://www.routledge.com

46. Torabi A A, Afrooz, G A, Hassani, F, Golshani, F. Designing a Family-Centered Behavioral Management Program (FBMP) and Evaluating its Effectiveness in Marital Satisfaction of Parents of Children with ADHD. Quarterly Journal of Family and Research, 2021; 18 (3): 25-42. (In Persian) http://dorl.net/dor/20.1001.1.26766728.1400.18.3.2.5

47. Kazemi Khoban S, Poursharifi H, Kakavand A, Xian Bagheri M. The effectiveness of the revised protocol of trauma-focused cognitive-behavioral therapy (TF-CBT) on the quality of life and psychological distress in female victims of domestic violence. armaghanj 2022; 9 (2): 62-75. file:///C:/Users/saeed%20veisi/Downloads/10005214010205.pdf

48. Şahin H, Türk F. The impact of cognitive-behavioral group psycho-education program on psychological resilience, irrational beliefs, and well-being. Journal of Rational-Emotive & Cognitive-Behavior Therapy, 2021; 39(4): 672-694. https://doi.org/10.1007/s10942-021-00392-5

49. Kranke D, Weiss EL, Gin J, Der-Martirosian C, Brown C, Saia JL, Dobalian, AA. A "culture of compassionate bad asses": A qualitative study of combat veterans engaging in peer-led disaster relief and utilizing cognitive restructuring to mitigate mental health stigma. Best Practices in Mental Health, 2017; 13(1): 20-33. https://www.ingentaconnect.com/content/follmer/bpmh/2017/00000013/00000001/art00004

50. Fisher HM, Taub CJ, Lechner SC, Heller AS, Lee, D J, Antoni, M H. Does the Broaden-and-Build Theory Explain Reduction in Social Disruption After a Brief Relaxation Intervention for Women With Breast Cancer Undergoing Treatment?. Behavior therapy, 2022; 53(5): 995-1008. https://doi.org/10.1016/j.beth.2022.04.002