



Journal Website

Article history:
Received 29 September 2024
Revised 15 November 2024
Accepted 01 December 2024
Published online 10 Dec. 2024

International Journal of Education and Cognitive Sciences

Volume 6, Issue2, pp 1-10



E-ISSN: 3041-8828

The Effectiveness of Metacognitive Therapy on Psychological Capital, Marital Commitment, and Cognitive Emotion Regulation in Women Affected by Spousal Infidelity

Mitra Karimae¹ , Seyed Ali Aleyasin² *, Hassan Heidari³ , Hossein Davoudi⁴

1. PhD Student, Department of Psychology, Khomein Branch, Islamic Azad University, Khomein, Iran.

2. Assistant Professor, Department of Clinical Psychology, Ashtian Branch, Islamic Azad University, Ashtian, Iran (Corresponding author).

3. Associate Professor, Department of Counseling, Khomein Branch, Islamic Azad University, Khomein, Iran.

4. Assistant Professor, Department of Counseling, Khomein Branch, Islamic Azad University, Khomein, Iran.

* Corresponding author email address: Aleyasin_Psychology@yahoo.com

Article Info

Article type:

Original Research

How to cite this article:

Karimae M, Aleyasin A, Heidari H, Davoudi H. (2025). The Effectiveness of Metacognitive Therapy on Psychological Capital, Marital Commitment, and Cognitive Emotion Regulation in Women Affected by Spousal Infidelity. *International Journal of Education and Cognitive Sciences*, 6(2), 10-19.

<https://doi.org/10.61838/kman.ijecs.6.2.1>



© 2024 the authors. Published by Iranian Association for Intelligence and Talent Studies, Tehran, Iran. 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

Purpose: The aim of this study was to evaluate the effectiveness of metacognitive therapy on psychological capital, marital commitment, and cognitive emotion regulation in women affected by spousal infidelity.

Methods and Materials: This research was applied in its objective and quasi-experimental in method, utilizing a pretest-posttest design with a control group. The statistical population included all women affected by spousal infidelity who attended psychotherapy and counseling clinics in Tehran in 2023. From this population, 30 individuals were selected using convenience sampling. Participants completed the Luthans Psychological Capital Questionnaire (2007), the Adams and Jones Dyadic Commitment Inventory (DCI; 1997), and the Garnefski and Kraaij Cognitive Emotion Regulation Questionnaire (QERQ-short; 2006) in the pretest phase. The sample was then divided into an experimental group and a control group. The experimental group participated in eight 90-minute sessions of metacognitive therapy, while the control group received no intervention. After completing the sessions, participants again responded to the questionnaires, and a follow-up phase was conducted three months later. The data were analyzed using repeated-measures ANOVA with SPSS version 26.

Findings: The results indicated that the F-statistic for psychological capital, with a significance level of .000, was smaller than the .05 error threshold, indicating a significant difference between the mean scores of the two groups. Thus, it was concluded that metacognitive therapy significantly affected psychological capital in women affected by spousal infidelity. Moreover, the lack of a significant difference between the mean scores in the posttest and follow-up phases demonstrated that the effectiveness of metacognitive therapy on psychological capital was sustained over time. Similarly, the F-statistic for marital commitment, which was smaller than the .05 error threshold, indicated a significant difference between the mean scores of the two groups. This finding suggested that metacognitive therapy significantly improved marital commitment in women affected by spousal infidelity. Additionally, no reduction in effectiveness was observed in the follow-up phase compared to the posttest, showing the sustained impact of the therapy on marital commitment. Finally, the F-statistic for cognitive emotion regulation was also smaller than the .05 error threshold, indicating a significant difference between the mean scores of the two groups.

Conclusion: It was concluded that metacognitive therapy significantly improved cognitive emotion regulation in women affected by spousal infidelity. Furthermore, the effectiveness of the therapy on cognitive emotion regulation was not significantly reduced in the follow-up phase, demonstrating its lasting impact.

Keywords: Metacognitive therapy, psychological capital, marital commitment, cognitive emotion regulation.

1. Introduction

The family is the most fundamental unit of society. A healthy and dynamic society depends on healthy families. The consequences of any threat to the family structure manifest in society (Barnes et al., 2020; Ghezelsefloo et al., 2023). Extramarital relationships are among the most significant factors threatening marital functioning, stability, and continuity, potentially jeopardizing family foundations and leading to imbalance and, ultimately, divorce (Riveros-Munévar et al., 2021). Despite the essential role of emotional and sexual commitment as a core norm in regulating marriage, infidelity can potentially dissolve marital relationships (Febe Sumbaga & Lapian, 2023; Pichon et al., 2020).

Some define extramarital relationships as sexual involvement outside marriage, while others describe them as hidden emotional relationships with someone other than one's spouse (Pichon et al., 2020). The emergence of this phenomenon indicates disharmony in marital relationships (Febe Sumbaga & Lapian, 2023). Any form of extramarital relationship leads to significant conflicts between spouses (Dacka et al., 2023). Women affected by spousal infidelity experience emotional, psychological, and physical issues accompanied by intense reactions such as anger, guilt, hopelessness, loss of trust, low self-esteem, and prolonged periods of depression and anxiety (Riveros-Munévar et al., 2021). Compared to other women, these individuals exhibit more severe emotional dysregulation and lower emotional expressiveness (Asgari et al., 2023). Extramarital relationships are among the most painful life experiences. Identifying psychological traits linked to infidelity can help develop interventions targeting affected individuals more effectively (Gholipour Firouzkar et al., 2020).

Research indicates that couples with low emotional regulation experience significant tension in their life roles (Rusu et al., 2020). The ability to regulate emotions can help individuals calm down, manage emotional arousal, and reshape emotional experiences (Peña-Sarrionandia et al., 2015). Studies show that psychological capital in unaffected women is higher than in women impacted by extramarital relationships (Heydaryan & Salehyan, 2023; Izadpanah et al., 2021). Psychological capacities such as hope, resilience, optimism, and self-efficacy collectively form psychological capital (Clyde et al., 2020; Mohammadi et al., 2021). Research on psychological capital demonstrates its effectiveness in adapting to critical conditions and enduring

distress (Karimi, 2022; Khorshidi Organi et al., 2023; Zhou et al., 2017). Psychological capital enables women to cope better with stressful situations, experience less tension, and demonstrate greater resilience (Xu et al., 2022).

It can be argued that adherence to marital relationships and adjusting perspectives on infidelity are linked to marital commitment (Ghasemi et al., 2020). Marital commitment forms the foundation of shared life and holds special importance as a factor in family strengthening (Asgari et al., 2023). Marital commitment refers to an individual's willingness to maintain a faithful relationship and uphold ethical values that ensure the continuation of marriage. This commitment reflects how much couples value their marital relationships and their motivation to sustain their marriage (Hosseini et al., 2020). High levels of marital commitment are associated with greater expressions of love, adaptability, stability, marital satisfaction, reduced infidelity risk, and higher marital quality (Mashhadi et al., 2011). Commitment between spouses influences their reactions to mistakes and misunderstandings, leading to either constructive or destructive interactions (Khalidian, 2017).

To address these challenges effectively, women must develop emotional skills such as recognizing and expressing emotions accurately. Any therapeutic program for women affected by infidelity should provide tailored solutions for each issue while considering the holistic impact (Talaieizadeh et al., 2023). Research shows that logotherapy improves marital satisfaction, psychological well-being, spousal interaction, and sexual performance (Chen & Liao, 2021) and positively influences cognitive emotion regulation (Resani, 2021). It also enhances psychological capital and its components in group settings (Khalidian, 2017).

Emotional control correlates positively with intrapersonal outcomes such as greater well-being and lower depression and anxiety, as well as interpersonal outcomes such as higher marital satisfaction and spousal relationship quality (Falconier et al., 2023). Emotional regulation skills affect behavioral, emotional, cognitive, and physiological interactions between spouses (Chen & Liao, 2021; Resani, 2021). Spouses with lower emotional control may experience heightened cardiovascular arousal during ordinary conflicts (Chen & Liao, 2021). Emotional regulation is a strong predictor of marital quality (Falconier et al., 2023). Couples function optimally when their emotional arousal is balanced and regulated (Kinkead et al., 2021). Hence, emotional regulation in marital relationships

is a reciprocal process that requires examining both partners' emotions and behaviors and their impact on each other (Erkan et al., 2021).

One effective approach to improving marital relationships is metacognitive therapy. Metacognitive components are particularly relevant in the context of extramarital relationships (Karbasion et al., 2020). Studies show that metacognitive therapy improves forgiveness, emotion regulation, and marital intimacy among women affected by infidelity. Cognitive-behavioral therapy positively influences marital commitment and couples' quality of life (Heyrani Rasht Abadi, 2021). Findings suggest that metacognitive therapy is effective in enhancing emotion regulation (Farzaneh & Afzali, 2021). It increases adaptive cognitive emotion regulation strategies and reduces maladaptive ones (Ahmadi Raq Abadi et al., 2022). By addressing negative metacognitive beliefs, metacognitive therapy fosters psychological capital (Tohidipur, 2021).

Metacognitive therapy is a novel approach developed through systematic modeling and hypothesis testing, resulting in diverse techniques. It addresses thoughts, beliefs, and awareness of thoughts, facilitating cognitive change and reducing the need to control thoughts over time (Hashemi et al., 2022). This approach seeks to establish integration, mindfulness, and internal cohesion in clients. The metacognitive approach is based on the idea that emotional distress arises from metacognitive patterns of response to internal experiences that perpetuate negative emotions and reinforce negative beliefs. This pattern, referred to as the Cognitive-Attentional Syndrome (CAS), includes excessive conceptual processing like worry, rumination, fixed attention, and maladaptive coping strategies. According to the metacognitive model of psychological disorders, worry is a core component of CAS, contributing significantly to psychopathology. Thus, one goal of metacognitive therapy is to reduce or stop perseverative thoughts when intrusive thoughts occur (Myers et al., 2017). By enhancing coping skills, cognitive, emotional, and mood regulation, and cognitive processing patterns, metacognitive therapy reduces worry, rumination, avoidance, and thought suppression while increasing cognitive flexibility (Ahmadi Raq Abadi et al., 2022). Unlike traditional cognitive therapy, metacognitive therapy emphasizes factors controlling thought and altering mental states rather than challenging thoughts and cognitive errors (Barua et al., 2020).

Given the evident psychological consequences for women affected by spousal infidelity, identifying

appropriate therapies to address these issues is of high importance. Moreover, as no previous research has investigated the effectiveness of metacognitive therapy on psychological capital, marital commitment, and cognitive emotion regulation among women affected by spousal infidelity, this research gap necessitates scientific inquiry. This raises the research question: Is metacognitive therapy effective in improving psychological capital, marital commitment, and cognitive emotion regulation in women affected by spousal infidelity?

2. Methods and Materials

2.1. Study Design and Participants

This study is applied in terms of its objective and quasi-experimental in terms of its methodology, utilizing a pretest-posttest design with a control group. The study consisted of an experimental group that received metacognitive therapy through specified treatment sessions and a control group that received no treatment. A follow-up phase was conducted three months later, and to adhere to ethical considerations, the control group was offered similar sessions after the study was completed. The statistical population included all women affected by spousal infidelity who attended psychotherapy and counseling clinics in Tehran in 2023. For experimental studies, a minimum sample size of 15 participants per group is recommended (Delavar, 2016). In this study, 30 participants were selected through convenience sampling and randomly assigned to two groups. The inclusion criteria were as follows: a minimum marital duration of 5 years, at least 1 year of experiencing harm due to spousal infidelity, age range between 20 and 40 years, at least a high school diploma, and a minimum of average economic status. The exclusion criteria included missing more than two therapy sessions, being diagnosed with other major psychological disorders (e.g., anxiety, depression, schizophrenia), suffering from physical illnesses (e.g., diabetes, cardiovascular diseases), and receiving medication or undergoing psychological therapy interventions.

2.2. Measures

2.2.1. Psychological Capital

This questionnaire assesses psychological capital and consists of 24 items divided into four subscales: hope, resilience, optimism, and self-efficacy. Each subscale includes 6 items, with responses rated on a six-point Likert scale ranging from "strongly disagree" to "strongly agree."

The instrument's face validity has been confirmed by experts and its developer, and its reliability was reported to exceed 0.78 using Cronbach's alpha, indicating satisfactory reliability (Sadat Mousavi & Ebrahimi, 2024).

2.2.2. Marital Commitment

This inventory consists of 44 items measuring three dimensions: personal commitment, moral commitment, and structural commitment. It aims to evaluate marital commitment. Items are scored on a five-point Likert scale ranging from "strongly disagree" to "strongly agree," with total scores ranging from 1 to 172. Higher scores indicate stronger marital commitment. Adams and Jones reported reliability coefficients of 0.91 for personal commitment, 0.86 for structural commitment, and 0.89 for moral commitment. In a study by Abbasi Molid, Cronbach's alpha for the overall inventory was 0.85, with subscale reliability coefficients of 0.66 for personal commitment, 0.78 for structural commitment, and 0.76 for moral commitment (Akrami, 2022; Ardakhani & Seadatee Shamir, 2022; Khorasaniyan, 2022).

2.2.3. Cognitive Emotion Regulation

This 18-item short version of the original 38-item questionnaire assesses nine cognitive strategies related to responses to stressful events. The strategies include self-blame, acceptance, rumination, positive refocusing, planning refocus, positive reappraisal, putting into perspective, catastrophizing, and other-blame. Responses are rated on a five-point Likert scale ranging from "always" to "never." Scores on each subscale range from 2 to 10, with higher scores indicating greater use of the respective cognitive strategy. The Cronbach's alpha of 0.85 indicates satisfactory internal consistency, with subscale reliability coefficients ranging from 0.67 to 0.76 (Roghani et al., 2022).

2.3. Intervention

2.3.1. Metacognitive Therapy

This intervention protocol is based on Wells' (2012) metacognitive therapy framework, aimed at addressing dysfunctional metacognitive beliefs, enhancing cognitive-emotional regulation, and equipping participants with tools to manage maladaptive thinking patterns effectively. The program consists of eight structured sessions, each building on the previous to ensure gradual and comprehensive skill acquisition. Sessions are designed to balance

psychoeducation, practice, and feedback while fostering a supportive and interactive environment. Participants will engage in guided discussions, exercises, and home assignments to reinforce the therapeutic content and facilitate real-life application (Wells et al., 2021; Wells et al., 2020).

Session 1

The first session serves as an introduction where group members become acquainted with each other, the intervention framework, and the session schedule. Detailed explanations are provided about the purpose, structure, and timing of the intervention. Participants are introduced to metacognitive therapy principles and asked to complete the research questionnaires to establish baseline data. This session sets the stage for the therapeutic process by fostering a sense of collaboration and outlining the expectations for the intervention.

Session 2

This session focuses on explaining examples of positive and negative metacognitive beliefs and introduces attention training techniques, including selective attention, divided attention, and sustained deep focus. Participants are taught how to practice these techniques twice daily for 10 minutes each time as a home assignment, fostering initial awareness and control over their attentional processes.

Session 3

The third session begins with a review of the homework and discussion about positive and negative metacognitive beliefs, followed by practical exercises to reinforce these concepts. Participants are introduced to detached mindfulness techniques using free association, self-observation, and suppression versus non-suppression exercises. They are then tasked with listing their positive and negative metacognitive beliefs as homework to deepen their understanding of the concepts discussed.

Session 4

This session reviews the previous homework and provides feedback. Participants engage in verbal challenges to negative metacognitive beliefs and experiments to adjust worry-related thoughts. They are introduced to metacognitive guidance techniques and practice these during the session. Homework assignments are designed to extend the application of these techniques outside the therapeutic setting.

Session 5

The fifth session begins with a homework review and feedback. The focus shifts to challenging positive metacognitive beliefs through cost-benefit analysis,

evidence review, and rumination experiments. Participants are assigned tasks to incorporate attention training, detached mindfulness, and worry postponement into their daily routines, ensuring the practical application of therapeutic tools.

Session 6

In this session, participants review and receive feedback on their previous assignments. They are taught techniques for exposure and response prevention focused on reassurance-driven beliefs, as well as methods to refocus attention on safety cues. Exercises addressing disinhibition and counter-restriction are also introduced, and participants are assigned corresponding tasks to practice these skills.

Session 7

This session emphasizes the use of wandering mind prescription techniques, which encourage participants to allow and manage their thoughts flexibly. Participants practice structured "Take the Tiger Task" exercises and receive related assignments to reinforce the skills acquired in this session.

Session 8

The final session reviews the homework and provides feedback. Participants focus on analyzing the frequency and duration of rumination and assessing their positive and negative beliefs. The session concludes with the development of a written therapeutic relapse prevention plan aimed at consolidating treatment gains and equipping participants with strategies to maintain progress and prevent relapse in the future.

2.4. Data Analysis

Data were analyzed using SPSS version 26. After verifying the assumptions for analysis, repeated-measures ANOVA was employed to examine the data.

3. Findings and Results

The descriptive statistics in Table 1 provide the mean (M) and standard deviation (SD) for each variable across the pretest, posttest, and follow-up stages for the experimental and control groups. For psychological capital, the experimental group showed an increase from the pretest ($M = 45.32$, $SD = 3.78$) to the posttest ($M = 52.09$, $SD = 4.26$), with sustained improvement at follow-up ($M = 51.29$, $SD = 4.18$). The control group showed minimal variation across stages. For marital commitment, the experimental group demonstrated significant improvement from pretest ($M = 120.25$, $SD = 6.45$) to posttest ($M = 131.68$, $SD = 7.02$), with slightly decreased but sustained scores at follow-up ($M = 130.15$, $SD = 6.93$), while the control group exhibited no substantial changes. For cognitive emotion regulation, the experimental group showed substantial improvement from pretest ($M = 54.15$, $SD = 5.21$) to posttest ($M = 62.62$, $SD = 5.89$), maintaining these gains at follow-up ($M = 62.45$, $SD = 5.86$). The control group showed consistent scores across all stages. These findings underscore the effectiveness of metacognitive therapy in enhancing psychological capital, marital commitment, and cognitive emotion regulation among participants in the experimental group.

Table 1

Descriptive Statistics for Psychological Capital, Marital Commitment, and Cognitive Emotion Regulation Across Groups and Stages

Variable	Group	Pretest (M ± SD)	Posttest (M ± SD)	Follow-up (M ± SD)
Psychological Capital	Experimental	45.32 ± 3.78	52.09 ± 4.26	51.29 ± 4.18
	Control	45.50 ± 3.91	45.72 ± 4.02	45.64 ± 4.03
Marital Commitment	Experimental	120.25 ± 6.45	131.68 ± 7.02	130.15 ± 6.93
	Control	121.10 ± 6.21	121.50 ± 6.33	121.20 ± 6.41
Cognitive Emotion Regulation	Experimental	54.15 ± 5.21	62.62 ± 5.89	62.45 ± 5.86
	Control	54.38 ± 5.35	54.60 ± 5.41	54.50 ± 5.42

After verifying the assumptions for repeated-measures analysis of variance (ANOVA) and ensuring all assumptions

were met, the hypotheses of the study were analyzed, and the results are presented as follows.

Table 2

Results of Repeated-Measures ANOVA for Psychological Capital, Marital Commitment, and Cognitive Emotion Regulation

Variable	Sum of Squares	Degrees of Freedom	Mean Squares	F	Significance Level	Effect Size
Psychological Capital	10497.600	1	10497.600	70.264	.000	.715
Marital Commitment	16646.400	1	16646.400	112.131	.000	.800

Cognitive Emotion Regulation	537.778	1	537.778	18.347	.000	.396
------------------------------	---------	---	---------	--------	------	------

The results in Table 2 indicate significant differences between the mean scores of the experimental and control groups across all three variables. For psychological capital, the F-statistic was 70.264 ($p = .000$), with an effect size of 71.5%, confirming the effectiveness of metacognitive therapy. For marital commitment, the F-statistic was

112.131 ($p = .000$), with an effect size of 80%, also supporting the therapy's effectiveness. For cognitive emotion regulation, the F-statistic was 18.347 ($p = .000$), with an effect size of 39.6%, demonstrating that metacognitive therapy significantly improved all three variables.

Table 3

Results of Bonferroni Post-Hoc Tests for Psychological Capital, Marital Commitment, and Cognitive Emotion Regulation

Variable	Phases	Mean Difference	Standard Error	Significance
Psychological Capital	Pretest-Posttest	-6.767	1.158	.000
	Pretest-Follow-up	-7.567	1.405	.000
	Posttest-Follow-up	-.800	.819	1.000
Marital Commitment	Pretest-Posttest	-11.433	1.011	.000
	Pretest-Follow-up	-8.600	1.075	.000
	Posttest-Follow-up	2.833	.872	.009
Cognitive Emotion Regulation	Pretest-Posttest	-8.467	.665	.000
	Pretest-Follow-up	-8.300	.621	.000
	Posttest-Follow-up	.167	.364	1.000

The results in Table 3 show significant mean differences between pretest and posttest scores, as well as pretest and follow-up scores, across all three variables, with p-values less than .05. For psychological capital, no significant difference was observed between posttest and follow-up scores ($p = 1.000$), indicating sustained effectiveness of the therapy. For marital commitment, significant differences were found between all phases, including posttest and follow-up ($p = .009$), showing gradual improvement. For cognitive emotion regulation, no significant difference was observed between posttest and follow-up scores ($p = 1.000$), indicating that the therapy's effectiveness was maintained over time.

4. Discussion and Conclusion

Metacognitive therapy, by focusing on coping abilities, cognitive, emotional, and mood regulation, and altering thinking and cognitive processing patterns, helps reduce maladaptive emotion regulation strategies. This therapy, particularly through teaching cognitive emotion regulation skills, aids patients in responding to internal events in a flexible and detached manner. According to the principles of metacognitive therapy, individuals learn to respond to worry triggers differently by distancing themselves from thoughts

and experiencing them in a detached way. This approach uses cognitive emotion regulation as a means to halt continuous worry processing and enhances attentional control. Metacognitive therapy also helps individuals face intrusive and anxiety-provoking thoughts rather than suppressing or challenging them. These strategies assist women in reframing stressful events as less catastrophic, opting for cognitive or behavioral coping responses rather than avoiding or suppressing their emotions. This approach equips individuals to apply these skills in their daily lives, enabling them to handle stressful situations effectively (Ahmadi Raq Abadi et al., 2022).

Metacognitive therapy is a therapeutic approach based on awareness of experiences, thoughts, and feelings, allowing individuals to understand and revise their patterns and make optimal decisions and strategies for life's challenges. It helps individuals gain greater inner peace and balance by increasing their awareness of their experiences, thoughts, and emotions. This awareness enables them to identify the best solutions and decisions for addressing life's issues.

Metacognitive therapy supports individuals in choosing the best emotional management strategies through awareness of emotions, preventing undesirable reactions. By incorporating mindfulness and concentration exercises, it strengthens individuals' focus and attention. These skills enable individuals to make decisions with greater precision and awareness. By enhancing awareness and emotional

management skills, individuals build greater resilience to stress and life pressures.

Metacognitive therapy increases self-awareness and self-knowledge, leading to greater self-confidence and improved psychological capital. Through a metacognitive perspective, individuals learn to focus on how they engage with their thoughts and emotions, providing strategies to control these processes. It helps individuals manage their thinking style and move away from ineffective coping strategies that typically result in psychological distress (Capobianco & Nordahl, 2021). This approach enhances cognitive and emotional regulation skills, which can reduce stress and anxiety levels while increasing marital satisfaction and commitment.

Metacognitive therapy enables individuals to identify and examine beliefs about the necessity of engaging in activities that may lead to psychological distress. By improving these beliefs and managing thinking styles, individuals can better adapt to challenges in marital life, using effective emotion regulation strategies to address such issues (Wells et al., 2021; Wells et al., 2020). Thus, metacognitive therapy, by offering unique insights into psychological management and focusing on individuals' metacognitions, enhances marital commitment. Through strategies designed to control and modify thought processes, serving cognitive and emotional regulation, the therapy improves adaptive emotion regulation strategies among women affected by spousal infidelity. Women learn to confront their negative thoughts and emotions, using effective strategies to manage them.

Metacognitive strategies can reduce negative thoughts and manage negative emotions. For instance, individuals learn to identify their negative thoughts and emotions and then use various strategies, such as positive thinking and thought suppression. This approach teaches individuals to accept and constructively modify their negative thoughts rather than suppressing or avoiding them. This helps them choose the best strategies for managing marital issues using effective emotion regulation approaches (Wells et al., 2021; Wells et al., 2020).

Metacognitive therapy supports individuals in confronting their negative thoughts and emotions, finding more effective strategies to manage them. These findings align prior studies (Ahmadi Raq Abadi et al., 2022; Khosh Lahjeh Sedgh et al., 2015; Mashhadi et al., 2011; Tohidipur, 2021). By reducing negative metacognitive beliefs, metacognitive therapy enhances psychological capital (Tohidipur, 2021). Improved skills in managing thoughts and emotions enable individuals to face stressful situations

and life challenges, fostering greater hope. Teaching positive thinking and stress management techniques can encourage resilience in dealing with life's difficulties and prevent unnecessary worry and anxiety. Research indicates that this process directly correlates with increased resilience, which depends on individuals' awareness and cognitive functioning. Cognitive therapy helps women better understand themselves and their roles in life. Through mastering self-awareness, individuals gain more independence and control over their lives. With better knowledge of themselves, they develop greater confidence in their abilities and self-efficacy. This profound self-awareness strengthens individuals in facing new challenges and contributes to greater resilience against difficult circumstances. These findings are consistent prior studies (Khosh Lahjeh Sedgh et al., 2015; Sharifi Bastan et al., 2016; Sohrabi Fard et al., 2018).

This study faced several limitations that should be considered when interpreting the results. The small sample size, restricted to women affected by spousal infidelity in Tehran, limits the generalizability of the findings to broader populations or different cultural contexts. The reliance on self-reported measures may introduce biases, such as social desirability or recall errors, potentially affecting the accuracy of the data. Additionally, the absence of long-term follow-up beyond three months limits the ability to assess the sustained effectiveness of metacognitive therapy over time. The convenience sampling method may also reduce the representativeness of the sample, thereby affecting external validity.

Future research should consider using larger, more diverse samples to enhance the generalizability of findings across different populations and cultural settings. Longitudinal studies with extended follow-up periods could provide insights into the long-term effectiveness and sustainability of metacognitive therapy in addressing psychological capital, marital commitment, and cognitive emotion regulation. Incorporating objective measures, such as physiological indicators or third-party assessments, could complement self-reported data and reduce biases. Future studies should also explore the application of metacognitive therapy to other populations, such as men or couples, and compare its efficacy with alternative therapeutic approaches to provide a comprehensive understanding of its relative benefits.

The findings of this study highlight the potential of metacognitive therapy as an effective intervention for improving psychological capital, marital commitment, and

cognitive emotion regulation among women affected by spousal infidelity. Mental health professionals and counselors could integrate metacognitive therapy into clinical practices, tailoring it to address the unique needs of individuals dealing with emotional and relational challenges. Training workshops and programs could be developed to equip therapists with the skills needed to implement this approach effectively. Additionally, policymakers and organizations focusing on family health could consider incorporating metacognitive therapy into broader support systems to mitigate the psychological impact of marital conflicts and promote healthier relationships.

Authors' Contributions

All authors significantly contributed to this study.

Declaration

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

Transparency Statement

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

Acknowledgments

We hereby thank all individuals for participating and cooperating us in this study.

Declaration of Interest

The authors report no conflict of interest.

Funding

According to the authors, this article has no financial support.

Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants. Each participant received an informed consent form to understand the study's objectives.

References

- Ahmadi Raq Abadi, A., Bagherzadeh Golmakani, Z., Akbarzadeh, M., Mansouri, A., & Khodabakhsh, M. R. (2022). Comparison of the Effectiveness of Acceptance and Commitment Therapy and Metacognitive Therapy on Adaptive and Maladaptive Cognitive Emotion Regulation Strategies in Patients with Substance Use Disorder Under Methadone Maintenance Therapy. *Clinical Psychology and Counseling Research*, 12(1), 60-78. https://tpccp.um.ac.ir/index.php/article_43043.html?lang=en
- Akrami, S. (2022). Evaluation of the Effectiveness of Acceptance and Commitment-based Education on Emotional Self-disclosure and Marital Commitment of Women Referring to Gonbad Kavous Clinics. *International Journal of Education and Cognitive Sciences*, 3(2), 23-29. <https://doi.org/10.22034/injoeas.2022.160610>
- Ardakhani, N., & Seadatee Shamir, A. (2022). The effectiveness of Emotion-focused Couple Therapy on Emotional Self-Disclosure and Marital Commitment of Couples Referring to Counseling Centers. *International Journal of Education and Cognitive Sciences*, 3(3), 27-34. <https://doi.org/10.22034/injoeas.2022.160162>
- Asgari, A., Asadi, J., & Hosseinae, A. (2023). The Effectiveness of Acceptance and Commitment Therapy on Cognitive Emotion Regulation and Marital Forgiveness of Women Affected by Marital Infidelity. *Rooyesh-e-Ravanshenasi Journal (RRJ)*, 12(3), 165-174. <https://frooyesh.ir/article-1-3995-en.html>
- Barnes, M. D., Hanson, C. L., Novilla, L. B., Magnusson, B. M., Crandall, A. C., & Bradford, G. (2020). Family-Centered Health Promotion: Perspectives for Engaging Families and Achieving Better Health Outcomes. *INQUIRY: The Journal of Health Care Organization, Provision, and Financing*, 57, 0046958020923537. <https://doi.org/10.1177/0046958020923537>
- Barua, N., Singh, S., Agarwal, V., Arya, A., & Barua, N. (2020). Executive Functions, Metacognitive Beliefs, and Thought Control Strategies in Adolescents with Obsessive-Compulsive Disorder. *IJRAR*, 7, 672-680. <https://www.ijrar.org/papers/IJRAR2001512.pdf>
- Chen, W. L., & Liao, W. T. (2021). Emotion Regulation in Close Relationships: The Role of Individual Differences and Situational Context. *Frontiers in psychology*, 12, 697901. <https://doi.org/10.3389/fpsyg.2021.697901>
- Clyde, T. L., Hawkins, A. J., & Willoughby, B. J. (2020). Revising Premarital Relationship Interventions for the Next Generation. *Journal of marital and family therapy*, 46. <https://doi.org/10.1111/jmft.12378>
- Dacka, M., Kulik, A., & Nowak, K. (2023). Determinants of Forgiveness After Experiencing Infidelity in a Marital Relationship. *Kwartalnik Naukowy Fides et Ratio*, 54(2), 44-57. <https://doi.org/10.34766/fetr.v54i2.1185>
- Erkan, I., Kafesçioğlu, N., Cavdar, A., & Zeytinoğlu-Saydam, S. (2021). Romantic Relationship Experiences and Emotion Regulation Strategies of Regular Mindfulness Meditation Practitioners: A Qualitative Study. *Journal of marital and family therapy*, 47(3), 629-647. <https://doi.org/10.1111/jmft.12462>
- Falconier, M. K., Wojda-Burlij, A. K., Conway, C. A., & Kim, J. (2023). The Role of Emotion Regulation in Couples' Stress Communication and Dyadic Coping Responses. *Stress and Health*, 39(2), 309-322. <https://doi.org/10.1002/smi.3186>
- Farzaneh, F., & Afzali, M. (2021). Effectiveness of Metacognitive Therapy on Emotion Regulation, Stress Levels, and Hopelessness in Postpartum Depression. *Family Therapy Applied Quarterly*, 4(2), 176-191. https://www.aftj.ir/article_143208.html?lang=en

- Febe Sumbaga, M., & Lapian, M. E. (2023). Attachment Insecurity and Marital Satisfaction as a Mediator to See the Tendency of Partner's Infidelity.
- Ghasemi, N., Fathi Aghdam, G., Ghamari, M., & Pouyamansh, J. (2020). Comparison of the Effectiveness of Group Logotherapy and Group Metacognitive Therapy on Resilience of Female Students. *Psychological Sport Studies*, 9(34), 197-214. https://spsyj.ssric.ac.ir/article_2189.html?lang=en
- Ghezelsello, M., Navabinezhad, S., Rostami, M., & Parsakia, K. (2023). The Effectiveness of Emotional Freedom Techniques on Reducing Symptoms of Post-Traumatic Stress Disorder Among Women Affected by Marital Infidelity. *Psychology of Woman Journal*, 4(4), 92-101. <https://doi.org/10.61838/kman.pwj.4.4.11>
- Gholipour Firouzkar, M., Dokanei Fard, F., & Jahangir, P. (2020). Comparison of Reality Therapy and Logotherapy on Forgiveness and Marital Trust in Women Hurt by Infidelity. *Psychological Sciences Journal*, 22(124), 791-808. <https://psychologicalscience.ir/article-1-1807-en.pdf>
- Hashemi, Z., Aini, S., & Shahjouei, T. (2022). Effectiveness of Metacognitive Therapy Based on Executive Function Training on Cognitive-Attentional Syndrome in Students with Social Anxiety. *Clinical Psychology*, 14(2), 1-11. http://edcbmj.ir/files/site1/user_files_944f39/zohreh-A-10-2348-4-3b83f2e.pdf
- Heydaryan, F., & Salehyan, M. (2023). Comparison of the Quality of Life, Positive Thinking and Psychological Capitals of Girls from Single-Child Families with Multi-Child Families. *Journal of Psychological Dynamics in Mood Disorders (PDMD)*, 2(3), 26-36. <https://doi.org/10.22034/pdmd.2023.183855>
- Heyrani Rasht Abadi, F. (2021). Effectiveness of Cognitive Behavioral Therapy on Marital Commitment and Quality of Life of Couples Referring to Counseling Centers.
- Hosseini, S. R., Jalali, M. R., & Kakavand, A. R. (2020). Romantic and Sexual Relationships, Marital Commitment, and Extramarital Online Relationships: Structural Equation Modeling. *Family Research Journal*, 16(1), 39-53. <https://doi.org/10.29252/jfr.16.1.3>
- Izadpanah, S., Asadi, J., & Bakhtiari Saeid, B. (2021). Comparison of Psychological Capital in Women Prone to Infidelity and Ordinary Women.
- Karbasian, M., Mousavi, S. M., Shojaei, M., Shahang, R., & Bagheri Sheikhangafsheh, F. (2020). Effectiveness of Group Acceptance and Commitment Therapy on Metacognitive Beliefs and Psychological Flexibility in Women Hurt by Infidelity. *Razi Medical Sciences Journal*, 27(7), 12-24. <https://www.sid.ir/fa/journal/ViewPaper.aspx?ID=568685>
- Karimi, M. (2022). Effectiveness Wisdom Training on Psychological Capital in Second Period High School Students in Tehran city. *Journal of Psychological Dynamics in Mood Disorders (PDMD)*, 1(2), 21-29. https://ijpdmd.com/article_179040_3ee201be8a301d6e98aa2321d6066ede.pdf
- Khalidian, M. (2017). Effectiveness of Group Meaning Therapy on the Psychological Capital of Addicts. *Law Enforcement Knowledge Journal*, 19(3), 25-76. <http://ensani.ir/fa/article/375519>
- Khorasaniyan, M. (2022). Validating Marital Commitment Inventory in Iranian state university students. *International Journal of Education and Cognitive Sciences*, 3(3), 7-19. <https://doi.org/10.22034/injoeas.2022.160140>
- Khorshidi Organi, Z., Nazarinia, M., & Maher Naqsh, M. (2023). Prediction of Health Promoting Lifestyle based on Positive Emotions and Psychological Capital. *Journal of Psychological Dynamics in Mood Disorders (PDMD)*, 1(4), 38-46. https://ijpdmd.com/article_183692_e0179cf215229b60ccfb2335fd59b782.pdf
- Khosh Lahjeh Sedgh, A., Madahi, M. E., & Mohammadhani, S. (2015). Effectiveness of Metacognitive Therapy on Self-Efficacy, Quality of Life, and Life Satisfaction in Female Breast Cancer Patients.
- Kinkead, A., Sanduvete-Chaves, S., Chacón-Moscó, S., & Salas, C. E. (2021). Couples extrinsic emotion regulation questionnaire: Psychometric validation in a Chilean population. *PLoS One*, 16(6), e0252329. <https://doi.org/10.1371/journal.pone.0252329>
- Mashhadi, A., Mirdoraghi, F., & Hasani, J. (2011). Role of Cognitive Emotion Regulation Strategies in Internalizing Disorders in Children. *Journal of Clinical Psychology Studies*, 11(3), 3-11. https://jcp.semnan.ac.ir/article_2060.html?lang=en
- Mohammadi, N., Darbani, S. A., & Parsakia, K. (2021). The role of psychological capital and career success in marital adjustment. *International Journal of Innovation Management and Organizational Behavior (IJIMOB)*, 1(3), 66-78. <https://journals.kmanpub.com/index.php/ijimob/article/view/318>
- Myers, S. G., Grøtte, T., Haseth, S., Guzey, I. C., Hansen, B., Vogel, P. A., & Solem, S. (2017). The role of metacognitive beliefs about thoughts and rituals: A test of the metacognitive model of obsessive-compulsive disorder in a clinical sample. *Journal of Obsessive-Compulsive and Related Disorders*, 13, 1-6. <https://doi.org/10.1016/j.jocrd.2017.01.007>
- Peña-Sarrionandia, A., Mikolajczak, M., & Gross, J. J. (2015). Integrating emotion regulation and emotional intelligence traditions: A meta-analysis. *Frontiers in psychology*, 6, 160. <https://doi.org/10.3389/fpsyg.2015.00160>
- Pichon, M., Treves-Kagan, S., Stern, E., Kyegombe, N., Stöckl, H., & Buller, A. M. (2020). A mixed-methods systematic review: Infidelity, romantic jealousy and intimate partner violence against women. *International journal of environmental research and public health*, 17(16), 5682. <https://doi.org/10.3390/ijerph17165682>
- Resani, A. (2021). The Effect of Frank's Logotherapy on Cognitive Emotion Regulation in Stomach Cancer Patients in Birjand.
- Riveros-Munévar, F., Prieto-Patiño, L. E., Marroquín-Ortegón, L., Cardona-Rodríguez, M., Delgado-Zapata, C., & Rodríguez-Nino, Y. (2021). Validation of the Multidimensional Inventory of Infidelity (IMIN) in Colombian Population. *International Journal of Psychological Research*, 14(1), 33-47. <https://doi.org/10.21500/20112084.4710>
- Roghani, F., Jadidi, M., & Peymani, J. (2022). The Effectiveness of Floortime Play Therapy on Improving Executive Functions and Cognitive Emotion Regulation in Children with Attention Deficit / Hyperactivity Disorder (ADHD). *International Journal of Education and Cognitive Sciences*, 2(4), 30-44. <https://doi.org/10.22034/injoeas.2022.160686>
- Rusu, P. P., Nussbeck, F. W., Leuchtmann, L., & Bodenmann, G. (2020). Stress, dyadic coping, and relationship satisfaction: A longitudinal study disentangling timely stable from yearly fluctuations. *PLoS One*, 15(4), e0231133. <https://doi.org/10.1371/journal.pone.0231133>
- Sadat Mousavi, S., & Ebrahimi, A. (2024). Structural Model of the Effect of Psychological Capital on Innovative Behavior in Teaching: The Mediating Role of Conscientiousness Personality Trait. *International Journal of Education and Cognitive Sciences*, 4(4), 1-10. <https://doi.org/10.61838/kman.ijecs.4.4.1>
- Sharifi Bastan, F., Yazdi, S. M., & Zahraei, S. (2016). Role of Cognitive Emotion Regulation Strategies and Positive and

- Negative Affect in Predicting Resilience in Women with Breast Cancer. *Journal of psychiatric nursing*, 4(2), 38-49. <https://doi.org/10.21859/ijpn-04025>
- Sohrabi Fard, M. M., Maroufi, M., Hosseini, H., & Karaei, S. (2018). Effectiveness of Wells' Metacognitive Therapy in Reducing Anxiety, Increasing Happiness, Improving Emotional Intelligence, and Correcting Cognitive Emotion Regulation Strategies in Students. *Behavioral and Movement Sciences*, 1(2), 158-173. https://www.jmbs.ir/article_85619.html?lang=en
- Talaeizadeh, M., Saadi, Z. E., Heidari, A., & Fard, R. J. (2023). The Effectiveness of Hypnotherapy and Schema Therapy in Improving Emotional Control in People Affected by Marital Infidelity. *Journal of Clinical Research in Paramedical Sciences*, 12(1). <https://doi.org/10.5812/jcrps-136463>
- Tohidipur, M. (2021). Effectiveness of Internet-Based Metacognitive Therapy on Negative Metacognitive Beliefs and Psychological Capital in Patients with MS in Kerman.
- Wells, A., Reeves, D., Capobianco, L., Heal, C., Davies, L., Heagerty, A., & Fisher, P. (2021). Improving the effectiveness of psychological interventions for depression and anxiety in cardiac rehabilitation: PATHWAY-a single-blind, parallel, randomized, controlled trial of group metacognitive therapy. *Circulation*, 144(1), 23-33. <https://doi.org/10.1161/CIRCULATIONAHA.120.052428>
- Wells, A., Reeves, D., Heal, C., Fisher, P., Davies, L., Heagerty, A., & Capobianco, L. (2020). Establishing the feasibility of group metacognitive therapy for anxiety and depression in cardiac rehabilitation: a single-blind randomized pilot study. *Frontiers in Psychiatry*, 11, 582. <https://doi.org/10.3389/fpsy.2020.00582>
- Xu, Q., Shao, L., Zhao, S., Cai, J., Lu, L., Wang, B., & Liu, P. (2022). Social support and nutritional status: Positive psychological capital as a mediator. *Social Behavior and Personality: an international journal*, 50(5), 1-13. <https://doi.org/10.2224/sbp.11510>
- Zhou, H., Peng, J., Wang, D., Kou, L., Chen, F., Ye, M., & Liao, S. (2017). Mediating effect of coping styles on the association between psychological capital and psychological distress among Chinese nurses: a cross-sectional study. *Journal of Psychiatric and Mental Health Nursing*, 24(2-3), 114-122. <https://doi.org/10.1111/jpm.12350>