

Comparison of the Effectiveness of Reality Therapy and Cognitive-behavioral Therapy on the Components of Basic Psychological Needs

Zahra Ebadi¹, Nastaran Ramezani², Farideh Sadat Zekri³, Behnaz Bozari⁴, Lida Nemati Chalavi^{4*}

1. Department of General Psychology, Payame Noor University, Tehran, Iran

2. Department of Psychology, West Tehran Branch, Islamic Azad University, Tehran, Iran

3. Department of General Psychology, South Tehran Branch, Payame Noor University, Tehran, Iran

4. Department of Guidance and Counseling, School of Educational Sciences and Counseling, Roudehen Branch, Islamic Azad University, Roudehen, Iran

* **Corresponding author:** Lida Nemati Chalavi, Department of Guidance and Counseling, School of Educational Sciences and Counseling, Roudehen Branch, Islamic Azad University, Roudehen, Iran. Tel: 09901060070; Email: masoud.hosini.g@gmail.com

Received 2024 January 24; Accepted 2024 June 21.

Abstract

Background: If couples do not learn communication and conflict resolution skills, disagreements will escalate from verbal to behavioral.

Objectives: This study aimed to examine the effectiveness of reality therapy based on choice theory and cognitive-behavioral therapy (CBT) in addressing the psychological needs of couples seeking counseling services.

Methods: This research was a quasi-experimental study employing a pretest-posttest design with a control group. It was conducted on couples seeking counseling in Tehran, Iran, during 2022-2023. Overall, 60 participants were selected through purposeful sampling and were divided into three groups: two experimental groups and one control group (20 participants each). The first experimental group received group reality therapy for 10 sessions, each lasting 60 min, while the second experimental group received CBT for eight sessions, each lasting 90 min. The control group, on the other hand, did not undergo any interventions. The data were collected using the Basic Psychological Need Scale and analyzed using SPSS software (version 23) through multivariate analysis of covariance (MANCOVA).

Results: The results showed a significant difference between the control group and the CBT group in identifying basic needs, namely love and belongingness, power, freedom, survival, and fun, with differences of 5.07, 5.46, 3.49, 5.31, and 4.74, respectively. The differences were statistically significant at the 0.01 level.

Conclusion: The findings suggest that although both methods were successful, reality therapy based on choice theory was more influential because of its unique strategy for resolving deep-seated conflicts experienced by individuals.

Keywords: Basic psychological needs, Cognitive-Behavioral therapy, Couples, Reality therapy

1. Background

Marital counseling is a valuable choice to enhance contentment in couples' relationships, as it equips them with vital knowledge to promote their comprehension and mindfulness regarding the factors that impact their marital bonds (1). Marriage counseling emphasizes resolving conflicts and communicating effectively to promote closeness between spouses. This therapy covers various aspects, including acquiring knowledge and information, managing emotions, values, and attitudes, and enhancing communication skills and decision-making abilities (2). Married couples can engage in open communication to address their problems and gain insight into each other's needs. Warm and close relationships within a family are crucial for personal growth and development, and achieving these goals is essential in a marital relationship (3). In today's world, there is an increasing number of marital conflicts for various reasons, which can lead to separation and negatively impact the mental health of couples. To address this issue, counselors specializing in family therapy have developed a range of theories to assist couples in facing marital conflicts. These theories primarily concentrate on couple therapy and family interventions from various perspectives. The main objective of these theories is to assist couples in preventing conflicts,

enhancing family efficiency, and resolving marital disputes (4). Reality therapy is one of the approaches inspired by these theories, which can effectively help couples understand each other's needs (5-6).

Distinguishing the basic needs of couples might be regarded as an influential factor in marital connections. These needs have been classified into five primary dimensions: survival, love and belongingness, power, freedom, and fun (7-9). All organisms have a common need for survival, which is genetically ingrained in all living beings (10). Humans, on the other hand, have four unique needs besides survival. These needs are love and belongingness, power (advancement/competence), freedom (independence), and fun (pleasure). These are considered fundamental psychological needs, while the need for survival is the only basic physiological need in humans (11). Radel and Clément-Guillotin propose that these four needs function at a more elevated and intricate level than the need for survival (12). Even though these five needs apply to all, their significance and priority can differ from person to person, with certain needs being more dominant in some individuals than in others (7). The emotional and physical well-being of couples is greatly influenced by whether their needs and requirements are satisfied or not (8). The adequate fulfillment of these needs leads to the experience of positive emotions and a sense of physical comfort. Conversely,

when couples' needs are left unfulfilled due to various reasons, they may encounter negative emotions and physical discomfort (7,8). Essentially, their emotions and bodily states serve as valuable indications of the extent to which their fundamental needs are being met at any moment (9).

In cognitive-behavioral therapy (CBT), individuals are given guidance in acquiring the necessary skills to modify their behavior, enhance interpersonal communication, solve problems, alter unhelpful beliefs and attitudes, and engage in cognitive reconstruction (13). The use of CBT and counseling makes it feasible to ameliorate family dynamics and augment marital contentment through the fortification of communication abilities and the cultivation of positive thinking (14). Scholars have reported that the CBT approach can be considered a suitable intervention in the realm of marital relationships to address various facets of this association (15). Research findings have also demonstrated that CBT yielded notable outcomes in the intimacy and marital contentment of divorced females (16).

2. Objectives

Given the increasing rate of divorce within the nation, the presence of behavioral and communicative issues is deemed to be a pivotal component. These problems exert a detrimental influence on the lives of partners and their immediate family members. Consequently, recognizing and implementing efficacious remedies to diminish conflicts and enhance spousal relations, as well as identifying their fundamental needs and exploring novel avenues for investigating marital issues, have become indispensable objectives for family therapists and researchers. This underscores the significance and essence of the present study. Therefore, based on the previous discourse, the present study aims to investigate whether there is a difference in the effectiveness of CBT and reality therapy based on choice theory in discerning the fundamental needs of couples seeking counseling services in Tehran, Iran.

3. Methods

This quasi-experimental study applied a pretest-posttest design with a control group. The statistical population of this study included all couples seeking services at Tehran psychological counseling centers in 2022-2023. A total of 60 couples were purposefully chosen to participate in this study and were randomly assigned to either the control group or one of the experimental groups (20 couples

each). The sample size was deemed sufficient after conducting an analysis using G-Power software with a significance level of 0.05 and a power test of 0.90 (Figure 1). Before the participants were selected, specific inclusion criteria were considered, including no history of drug abuse, no previous divorce experience, no pending divorce petition, and no physical or psychological illnesses. Conversely, individuals who did not attend at least two intervention sessions, did not receive concurrent treatment, or did not use prescribed medication were excluded from the study. Before implementing the intervention protocols, the researchers explained the study's objectives to the participants.

Furthermore, we strictly followed the ethical guidelines for conducting medical research involving human subjects. Our research focused on couple therapy, and the couples received interventions together. The participants were guided by a therapist from the counseling center in a group setting, with the therapist overseeing the session. It is important to mention that no teaching tools were utilized. The teaching approach involved interaction in the form of lectures and group discussions. Each couple was given 15 min to discuss the topic at hand, with the therapist leading the remainder of the session. Additionally, the therapist facilitated the discussion on the new content provided and made any necessary clarifications to help the couples grasp the concepts. Once the couples referred to Tehran counseling centers were identified, they underwent the same testing conditions. Subsequently, the first experimental group received group reality therapy based on choice theory for 10 sessions, each lasting 60 min (17) (Table 1), while the second group underwent CBT for eight sessions, each lasting 90 min (18). The control group did not receive any interventions (Table 2).

At the end of every session, the therapists summarized the information presented. After the intervention was over, both experimental groups and the control group underwent a post-test in identical conditions. Additionally, once the post-test phase was finished, the control group underwent a week of intensive reality therapy based on choice theory sessions to adhere to the ethical guidelines. The collected data were then analyzed using SPSS software (version 23) with multivariate analysis of covariance (MANCOVA). It is important to mention that a P-value of less than 0.01 was deemed statistically significant.

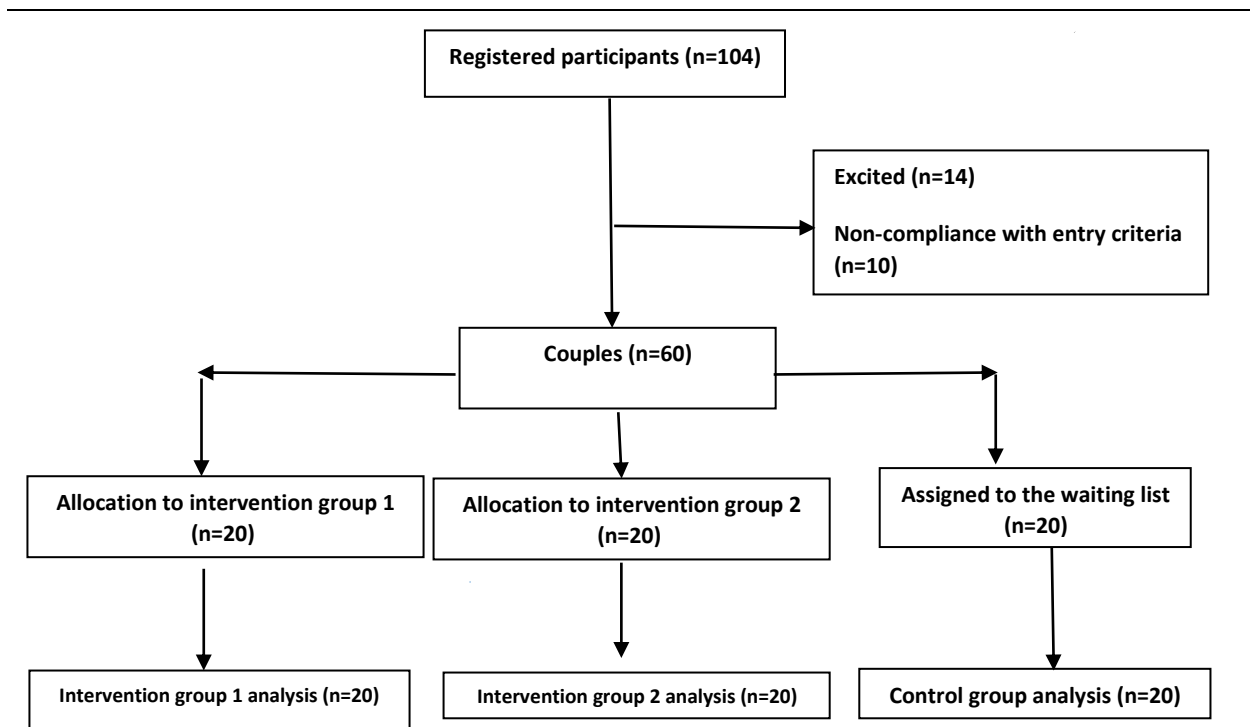


Figure 1. Flow diagram of the study

Instruments

Basic Psychological Need Scale

La Guardia et al. (19) developed this scale, which was later adapted to be used in Iran by Ghorbani and Watson (20). It includes 21 items divided into three subscales: autonomy satisfaction (seven items), competence satisfaction (six items), and relatedness satisfaction (eight items). Participants rate their responses using a seven-point Likert scale, with options

ranging from “7=very true” to “1=not true at all”. There is no specific cutoff point for this scale, with higher scores meaning greater satisfaction of psychological needs. The validity of this scale has been reported to be between 0.76 and 0.79 for Iranian managers and students (21). In this study, the Cronbach’s alpha reliability coefficient was found to be 0.81 for love and belongingness, 0.77 for power, 0.79 for freedom, 0.78 for survival, and 0.81 for fun

Table 1. Content of reality therapy based on choice theory

Session	Content of the session
1. Creating an emotional bond and conducting the initial assessment	Introducing the group members to each other, outlining the objectives, explaining group rules, stressing the importance of building rapport with authorities, and conducting preliminary assessments
2. Recognizing the current issue at hand	Assessing the members’ needs, deliberating on their overall conduct, focusing on present behaviors, and establishing a target
3. Identifying the actions taken to address the issue	Reviewing members’ requests, deliberating on their behavior, focusing on their current actions, and setting objectives
4. Assessing current behaviors or making judgments about behavior	Helping members analyze their behavior and current lives without dwelling on past failures or choices and embrace the idea of choice theory
5. Acknowledging the significance of responsible behavior in reality therapy	Helping members take charge of their lives by focusing on internal control, meeting survival needs, fostering a sense of belonging, power, value, freedom, and fun, and effectively satisfying them
6. Exploring different options	Helping members explore viable alternatives to fulfill personal desires, meet basic needs through practical means, and take greater responsibility for real-life decisions
7. Developing a program to address and resolve the problem	Helping members to create practical strategies and motivating individuals to explore different options, beginning with small goals and building upon them for the next stages Helping members formulate a strategy for carrying out the requested tasks and highlighting the importance of effective, logical, and feasible plans Employing methods such as role-playing, logical conversations, open discussions to transform pessimistic attitudes into optimistic ones, challenging limiting beliefs, meditation, and questioning tactics
8. Encouraging clients to fully commit to and follow the program	Discussing the idea that every action or decision results in consequences, emphasizing the inevitable outcomes of behaviors and the importance of dedication to implementing practical programs, and exploring alternative approaches to achieve the desired goals Helping participants recognize the significance of their relationships and interactions with others
9. Creating a plan to assess the effectiveness of the program	Refusing to accept excuses, reevaluating priorities for projects that clients fail to deliver, avoiding punitive actions that harm relationships and damage one’s reputation, promoting assessment, adjusting timelines, showing commitment, and reexamining past unsuccessful strategies
10. Summarizing the information and drawing conclusions	Compiling a recap of previous discussions from group members, analyzing assignments and the feedback provided, presenting a concluding overview, executing post-test assessments, and concluding the session

Table 2. Cognitive behavioral couple therapy protocol

Session	Content of the session
First session	Building a positive rapport with the couple, outlining the guidelines, goals, and frequency of the sessions, conducting both individual and joint assessments, and administering a pre-test before starting the therapy
Second session	Explaining the treatment procedure, assessing and setting the main objectives, recognizing issues and factors contributing to the couple's infidelity, and emphasizing methods to enhance love and intimacy
Third session	Highlighting and concentrating on implementing and utilizing challenges to enhance the levels of closeness. Helping couples recognize the influence of cognitive mistakes on one's partner's actions and bonds, examine adverse behaviors, criticism, and fault-finding, express intentions of ending the relationship, and pinpoint individual fundamental requirements of a spouse in marriage
Fourth session	Teaching cognitive patterns to couples and emphasizing the importance of increasing tolerance to help them overcome challenges more quickly The concept of identifying cognitive errors through the use of Socratic questioning is also an essential aspect of this approach. Couples are often given assignments to complete at home as part of this process.
Fifth session	One key component of this method is identifying irrational thoughts and beliefs within the couple and then challenging these beliefs as a means of ultimately changing their thought patterns. Additionally, couples are encouraged to engage in pleasant activities together and express positive qualities about each other as a way of fostering a more positive relationship dynamic.
Sixth session	Other strategies employed in this approach include exchanging behaviors, increasing individual activities, teaching communication skills, providing training in active listening, expressing clear behavioral expectations, and assigning homework to reinforce learning.
Seventh Session	Teaching and rehearsing problem-solving strategies, assertiveness, time management to complete tasks, and emotional skills Teaching emotional awareness and its significance in family dynamics, providing guidance on overcoming obstacles, and offering training to help couples recognize their conflict resolution style
Eighth Session	Discussing the impact of mental influences on sexual performance, providing an overview of sexual dysfunctions, and offering strategies for enhancing emotional resilience in marriage and ways to address enduring challenges Reviewing the aforementioned topics, evaluating the client's response to sessions and outcomes, administering a post-assessment, and concluding the sessions

4. Results

According to [Table 3](#), after evaluating the post-test scores of both experimental groups and the control group while taking into account the influence of pre-tests, an analysis was conducted on the impact of CBT and reality therapy interventions on the recognition of fundamental needs.

The results displayed in [Table 4](#) indicate significant differences between the CBT, reality therapy, and control groups in at least one of the dependent variables, as revealed by the statistical test of multivariate analysis of covariance (MANCOVA).

[Table 5](#) demonstrates the F ratio of the analysis of covariance test (ANCOVA) for various components of identifying basic needs, namely love and belongingness, power, freedom, survival, and fun. The F ratio values were obtained for each component (love and belongingness: $F=90.50$, $P=0.01$; power: $F=120.09$, $P=0.01$; freedom: $F=42.93$, $P=0.01$; survival: $F=90.82$, $P=0.01$; fun: $F=101.85$, $P=0.01$). These results indicate a significant difference in the dependent variables (identification of basic needs components) across CBT,

reality therapy, and control groups.

According to [Table 6](#), there was a significant difference between the control group and the CBT group in identifying basic needs, namely love and belongingness, power, freedom, survival, and fun, with differences of 5.07, 5.46, 3.49, 5.31, and 4.74, respectively, at the 0.01 level. This indicates that the CBT group differed significantly from the control group in identifying basic needs. Additionally, the mean differences between the control group and the reality therapy group in identifying basic needs, namely love and belongingness, power, freedom, survival, and fun, were 7.76, 7.46, 6.52, 8.53, and 7.91, respectively, which were statistically significant at the 0.01 level. This finding shows that the reality therapy group differed significantly from the control group in identifying basic needs ([Table 7](#)). Moreover, comparing the CBT group and the reality therapy group showed a significant difference in identifying basic needs, namely love and belongingness, power, freedom, survival, and fun, with differences of 2.68, 1.99, 3.03, 3.22, and 3.17, respectively, at the 0.01 level. This indicates a significant difference in favor of

Table 3. Distribution of the subjects in the cognitive-behavioral therapy group according to their education level and age

Level of education	Reality therapy		Cognitive-behavioral therapy			Control
	F		F			F
High school	0		2			1
diploma	8		7			6
Associate degree	2		2			4
Bachelor's degree	8		8			8
Master's degree	2		1			1
Total	20		20			20
Male	Female	Male	Female	Male	Female	Age in years
3	3	4	1	6	3	35-39
6	2	5	2	4	4	30-34
1	4	1	5	0	3	25-29
0	1	0	2	0	0	20-24
10	10	10	10	10	10	Total

Table 4. Mean and standard deviation of experimental and control groups in pre-test and post-test

Variables	Groups	Pre-test	Post-test
		Mean±SD	Mean±SD
Identifying basic psychological needs (love and belongingness)	Cognitive-behavioral therapy	9.20±1.15	14.05±1.05
	Reality therapy	9.05±1.39	16.75±3.19
	Control group	8.90±1.48	9.10±1.29
Identifying basic psychological needs (power)	Cognitive-behavioral therapy	8.95±1.57	14.75±1.80
	Reality therapy	8.75±1.61	16.75±3.006
	Control group	9.35±0.98	9.55±0.94
Identifying basic psychological needs (freedom)	Cognitive-behavioral therapy	8.75±1.61	12.20±1.70
	Reality therapy	8.85±1.66	15.40±3.63
	Control group	8.30±1.71	9.20±1.70
Identifying basic psychological needs (survival)	Cognitive-behavioral therapy	8.85±1.46	14.40±1.23
	Reality therapy	9.35±1.22	17.85±2.62
	Control group	8.85±1.59	8.50±1.98
Identifying basic psychological needs (fun)	Cognitive-behavioral therapy	8.80±1.73	13.30±1.75
	Reality therapy	8.95±1.43	16.65±3.15
	Control group	8.80±1.70	7.90±1.94

Table 5. Results of multivariate analysis of covariance

Test	Value	F	P
Pillai's trace	0.922	4.59	0.001
Wilks Lambda	0.100	11.31	0.001
Hotelling's T-sq	8.730	22.37	0.001
Roy's largest root	8.705	46.79	0.001

Table 6. Results of the univariate analysis of covariance

Variables	SS	MS	F	P
Identifying basic psychological needs (love and belongingness)	299.17	149.58	90.50	0.001
Identifying basic psychological needs (power)	345.51	172.75	120.09	0.001
Identifying basic psychological needs (freedom)	151.72	75.86	42.93	0.001
Identifying basic psychological needs (survival)	308.36	154.18	90.82	0.001
Identifying basic psychological needs (fun)	378.75	189.37	101.85	0.001

Table 7. Results of the Bonferroni's post hoc test to compare the difference between the means of identifying basic needs

Variables	Comparison groups	The mean difference	The standard error	P
Identifying basic psychological needs (love & belongingness)	Group 1-Control group	5.07	0.755	0.001
	Group 2-Control group	7.76	0.755	0.001
	Group 1-Group 2	2.68	0.700	0.001
Identifying basic psychological needs (power)	Group 1-Control group	5.46	0.720	0.001
	Group 2-Control group	7.46	0.730	0.001
	Group 1-Group 2	1.99	0.668	0.003
Identifying basic psychological needs (freedom)	Group 1-Control group	3.49	0.854	0.001
	Group 2-Control group	6.52	0.865	0.001
	Group 1-Group 2	3.03	0.791	0.001
Identifying basic psychological needs (survival)	Group 1-Control group	5.31	0.690	0.01
	Group 2-Control group	8.53	0.699	0.01
	Group 1-Group 2	3.22	0.640	0.01
Identifying basic psychological needs (fun)	Group 1-Control group	4.74	0.749	0.01
	Group 2-Control group	7.91	0.759	0.01
	Group 1-Group 2	3.17	0.694	0.01

the reality therapy group in identifying basic needs over the CBT group.

5. Discussion

This study aimed to evaluate the efficacy of reality therapy and CBT in identifying basic needs in couples. The findings revealed a significant difference in the identification of basic needs between the mean scores of reality therapy, CBT, and control groups. A significant difference was also found between the control group and the reality therapy group in identifying basic needs, indicating a significant difference in favor of reality therapy over the control group in identifying basic needs. In addition, the

identification of basic needs in the reality therapy group significantly varied from that of the CBT group, indicating a significant difference in favor of reality therapy in identifying basic needs over CBT.

Several studies have examined the effectiveness of reality therapy and CBT, each focusing on certain variables or statistical populations. However, very few studies have directly compared these two approaches. In a previous study conducted by Mohammad Yousefi et al., a comparison was made between the effectiveness of CBT and parenting styles based on reality therapy in improving impulse control, flexibility, and empathy in mothers. The results indicated that both CBT and parenting styles based on reality therapy had an impact on distressed

mothers' impulse control, flexibility, and empathy. Moreover, teaching parenting styles based on reality therapy was more effective in controlling these variables than CBT (22). Research has also shown that utilizing reality therapy with a focus on group dynamics, which aligns with Glasser's choice theory, improved the general welfare of women who had gone through divorce and reduced their stubborn beliefs (23). This approach encourages individuals to reflect on their thinking process, which enhances their ability to take responsibility for their behavior and fosters optimism (24). It also leads to a decrease in aggression (25), an increase in intimacy and satisfaction within marriages (26), and a reduction in internalizing issues (27).

Glasser focuses on close relationships and human happiness in his theory of choice. He emphasizes the importance of improving relationships and increasing satisfaction and responsibility. Glasser sees personal relationships as a key factor in our happiness and unhappiness. He believes that the only major problem in human life is the issue of relationships (28). According to Glasser, it is crucial to acknowledge that psychology plays a role in our interactions with others. However, we often engage in this form of communication from a young age without even being aware of it, and regrettably, we fail to recognize the detrimental impact this ignorance can have on our relationships (11). According to Glasser, all living beings share a common need, which is the survival instinct ingrained in their genetic makeup (10). Apart from this, humans have four distinct types of needs that function at a more advanced and intricate level (12).

Love and belongingness, power (growth/competence), freedom (independence), and fun (pleasure) make up these four basic psychological needs, while survival stands as the sole fundamental physiological need for humans (11). When these needs are adequately fulfilled, individuals experience pleasant emotions. Meeting these needs also leads to the experience of positive emotions, whereas failure to satisfy them can result in negative emotions (29). Based on choice theory, the identification of couples' basic needs is greatly aided by the needs of love, belonging, and enjoyment, and the higher these needs are in individuals, the greater their impact is on their satisfaction. However, the desire for independence in a relationship is not inherently abnormal or contradictory to maintaining a healthy and lasting connection. Yet, when this longing for freedom becomes excessively intense, it can hinder the development of profound and long-lasting emotional closeness and dedication (11,30). Consequently, individuals with a strong desire for freedom are more susceptible to conflicts and dissatisfaction in their interpersonal relationships. According to choice theory, individuals must recognize their unique pattern of basic needs, as this awareness can

significantly influence their ability to make healthy and productive choices in their personal and social lives. The fulfillment, or lack thereof, of these five needs directly and tangibly affects our emotional and physical well-being. When these needs are effectively met, we experience pleasant emotions and bodily sensations; however, if they are continually unmet or thwarted, we will endure unpleasant feelings or physical conditions. Therefore, our emotions and physical states serve as indicators of whether our basic needs are being adequately fulfilled or not (11,27).

In this study, CBT had a notable impact on enhancing every aspect of fundamental psychological needs. Although it was not as effective as reality therapy based on choice theory, it surpassed the control group. Regrettably, due to the lack of previous comparisons between these two approaches, it is impossible to make any remarks regarding their alignment or misalignment. In a previous study, Rahimi et al. discovered that two distinct couple therapy methods resulted in substantial alterations in marital intimacy, with no significant difference in the effectiveness of the two treatments. As evidenced by the obtained results, it can be concluded that both CBT and reality therapy based on choice theory are effective in the promotion of marital satisfaction and sexual intimacy in couples. Nonetheless, CBT demonstrated more dramatic effects than reality therapy (31). Previous studies showed that distressed mothers' impulse control, flexibility, and empathy were influenced by both CBT and the teaching of parenting styles based on reality therapy. However, teaching parenting styles based on reality therapy had a stronger impact on the variables studied compared to CBT (32).

Cognitive-behavioral therapy encompasses various techniques, such as regulating emotions, managing psychological stress, improving communication, exercising self-control, and developing values and self-efficacy. Through the interaction between individuals and their environment, this therapy enhances the recognition of couples' fundamental needs. Therefore, CBT plays a crucial role in addressing these objectives. By providing couples with appropriate cognitive-behavioral training, the risk factors associated with their ignorance of their needs and marital conflicts can be diminished (15). Consequently, this approach mitigates the issues these couples may pose to society and their families. Additionally, CBT offers several advantages in terms of managing behavioral symptoms, investigating the root causes of events, addressing emotional triggers, countering negative thoughts, utilizing thought recording techniques, identifying and challenging negative self-talk, letting go of pessimistic thoughts, rectifying misconceptions, preparing for comprehensive training, and replacing negative thoughts with positive ones. This perspective aligns harmoniously with the principles

of choice theory (16).

The present study, similar to most studies in the field of behavioral sciences, had limitations that are worth acknowledging to help future research minimize or eliminate them. One limitation of this study was the absence of a follow-up stage. Additionally, the research sample was limited to couples seeking counseling in Tehran, so caution must be exercised when generalizing the findings. The presence of individual and familial differences in personality traits, as well as variations in attitudes and education levels regarding the variables under investigation, may have influenced the research results. It is thus recommended to compare the effectiveness of CBT and reality therapy in different cities in Iran, taking into account their impact on other variables and examining the advantages they offer. Another recommendation is to incorporate a follow-up stage to assess the effectiveness of CBT and reality therapy. Furthermore, future research should investigate and compare the extent to which these two temporal approaches yield reduction effects considering marriage duration, the number of children, gender, and marital status.

6. Conclusion

To summarize, the findings suggest that although both methods were successful, reality therapy based on choice theory emerged as more influential because of its unique strategy for resolving deep-seated conflicts experienced by individuals.

Acknowledgments

We would like to thank all the people who greatly assisted us in this study.

Conflicts of interest

The authors declare no conflicts of interest.

References

- Aviram A, Nadan Y. "I miss not being able to offer my couples a box of tissues...": Couples' and Therapists' perspectives on the therapeutic Alliance with the transition to online couple therapy. *Family Process*. 2023 Jan 29.
- Ebadi Z, Pasha R, Hafezi F, Eftekhari Z. The effectiveness of cognitive behavioral therapy on marital intimacy and identification of the basic psychological needs among couples referring to counseling centers. *Avicenna Journal of Neuro psycho physiology*. 2018;5(4):189-96.
- Jamalnik M, Falsafinejad MR, Khodabakhshi-Koolaei A. Long-term marital satisfaction: Couples' narratives of the role of mate selection. *Journal of Client-centered Nursing Care*. 2020 Nov 10;6(4):267-76.
- Fani Sobhani F, Ghorban Shiroudi S, Khodabakhshi-Koolaei A. Effect of two couple therapies, acceptance and commitment therapy and schema therapy, on forgiveness and fear of intimacy in conflicting couples. (2021): 271-282.
- Arab A, Khodabakhshi-Koolaei A. The magic of WDEP in reality therapy: Improving intimacy needs and personal communication in married males. *European Journal of Psychology Open*. 2023 Jan 30.
- Platt J. How far does choice theory succeed, within classics, as a form of differentiation in the classroom?. *Journal of Classics Teaching*. 2018;19(37):10-6.
- Zarei EG, Borumand R, Sadeghifard M, Najarpourian S, Askari MA. Effectiveness of group counseling based on choice theory on increasing intimacy and marital satisfaction and reducing marital conflicts in married women. *Hormozgan Medical Journal*. 2017 Jan 1;21(4):250-9.
- Kutlu M, Pamuk M. Analysis of social and emotional loneliness according to glasser's basic needs. *Educational Process: International Journal*. 2016;5(2):128.
- McGregor SL. Re-envisioning basic human needs in the AAFCS Body of Knowledge. *International Journal of Home Economics*. 2014 Jan 1;7(2):17-35.
- Wubbolding RE, Wubbolding ST. Choice Theory and Reality Therapy in Korea, the land of the morning calm. *International Journal of Choice Theory and Reality Therapy*. 2017 Mar 1;36(2):144-7.
- Glasser W. Reality/Choice Theory. *Contemporary Case Studies in School Counseling*. 2019 Jul 17:79.
- Radel R, Clément-Guillotin C. Evidence of motivational influences in early visual perception: Hunger modulates conscious access. *Psychological science*. 2012 Mar;23(3):232-4.
- Nyer MB, Fisher LB, Pittman MA, Matthews JD, Farabaugh A. Cognitive behavioral therapy for depression. In *The Massachusetts General Hospital handbook of cognitive behavioral therapy* 2023 Jul 19 (pp. 115-140). Cham: Springer International Publishing.
- Ryum T, Bennion M, Kazantzis N. Integrating between-session homework in psychotherapy: A systematic review of immediate in-session and intermediate outcomes. *Psychotherapy*. 2023 Sep;60(3):306.
- Yousefi S, Bafghi ZR, Ahmadi A, Joulaei H, Bolhari J, Mirzai M. Spirituality Enhanced with Cognitive-Behavioral Techniques in Extramarital Infidelity: A Literature Review. *Zahedan Journal of Research in Medical Sciences*. 2023 Dec 31(In Press).
- Yazar R, Tolan Ö. Cognitive-behavioral approach in marital therapy. *Psikiyatri Guncel Yaklasimlar*. 2021;13(1):1-22.
- Glasser W. Counseling with choice theory: The new reality therapy. Retrieved August 24, 2006.
- McKay D, Sookman D, Neziroglu F, Wilhelm S, Stein DJ, Kyrios M, Matthews K, Veale D. Efficacy of cognitive-behavioral therapy for obsessive-compulsive disorder. *Psychiatry research*. 2015 Feb 28;225(3):236-46.
- La Guardia JG, Ryan RM, Couchman CE, Deci EL. Within-person variation in security of attachment: a self-determination theory perspective on attachment, need fulfillment, and well-being. *J Pers Soc Psychol*. 2000 Sep;79(3):367-84.
- Ghorbani N, Watson PJ. Two facets of self-knowledge, big five and promotion among Iranian managers. *J Soc Behav Pers Int J* 2004;6:769-77.
- Mohammadi M, Salimi A, Zahrakar K, Davornia R, Shakrabi M. Effectiveness of the relationship enrichment program on reduction of marital boredom of couples. *Psychiatric Nursing Journal*. 2016;4(3):15-8.
- Mohammad Yousefi S, Abbasi G, Emadian S O. Comparison of Effectiveness of Cognitive Behavioral Therapy and Parenting Styles Based on Reality Therapy in Mothers' Impulse Control, Flexibility, and Empathy. *Avicenna J Neuro Psycho Physiology* 2021; 8 (1) :19-24
- Ebnosharieh J, Aghili S M. Effectiveness of group based reality therapy based on Glasser choice theory on the general health and obsessive beliefs of divorced women. *J Gorgan Univ Med Sci* 2018; 20 (4) :53-60
- Karimyar Jahromi M, Mosallanejad L. The impact of reality therapy on metacognition, stress and hope in addicts. *Glob J Health Sci*. 2014 Sep 23;6(6):281-7. doi: 10.5539/gjhs.v6n6p281. PMID: 25363118; PMCID: PMC4825487
- Pouravari M, Zandipour T, Pouravari M, Salehi S. The Effectiveness of Group Choice Theory and Reality Therapy Training on Reducing the Aggression in Female Students. *International Journal of Applied Behavioral Sciences*. 2018 Jan

- 29(4):50-6.
26. Ebadi Z, Pasha R, Hafezi F, Eftekhari Z. Effectiveness of reality therapy based on choice theory on marital intimacy and satisfaction. *Journal of Midwifery and Reproductive Health*. 2020 Apr 1;8(2):2230-9.
27. Nooripour R, Sikström S, Amirinia M, Chenarani H, Emadi F, J Lavie C, Ilanloo H, Hosseini S. Effectiveness of Group Training Based on Choice Theory on Internalizing Problems, Empathy, and Identity Transformations Among Male Adolescents. *Journal of Research and Health*. 2023 May 10;13(3):197-208.
28. Glasser W. Take charge of your life: How to get what you need with choice-theory psychology. IUniverse; 2013 Mar 19.
29. Haushofer J, Fehr E. On the psychology of poverty. *science*. 2014 May 23;344(6186):862-7.
30. Fitzgerald AL. Reality therapy for marital and family systems counseling. *Counseling & Wellness: A Professional Counseling Journal*. 2011;2:88-101.
31. Rahimi A, Amiri H, Afshariniya K, Arefi M. Comparing the Effectiveness of Cognitive Behavioral Therapy (CBT) with Acceptance and Commitment Therapy (ACT) in the Enhancement of Marital Satisfaction and Sexual Intimacy in Couples Referred to Counseling Centers. *Avicenna J Neuro Psycho Physiology* 2020; 7 (2) :126-132.