

Effectiveness of Couple Therapy Based on Choice Theory in Marital Burnout and Communication Styles of Infertile Couples

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Abstract

Background: Infertility as one of the major life crises puts considerable pressure on infertile couples, leading to disrupted quality of marital life, reduced communion, and helplessness.

Objective: The current study sought to ascertain the efficacy of couple therapy based on choice theory in marital burnout and infertile couples' communication styles.

Methods: This quasi-experimental study was conducted based on a pre-test post-test control group design with a follow-up period. The statistical population of the study consisted of all infertile couples referred to counseling and treatment centers in Tehran in 2019. Out of this population, 30 subjects were selected by convenience sampling method and randomly assigned to two groups (n=15 in each group). The couple therapy program based on choice theory was performed weekly in the experimental group, while the control group did not receive any intervention. The two groups responded to marital burnout and communication styles questionnaires in the pre-test, post-test, and follow-up. Data analysis was performed in SPSS software (version 22) using covariance analysis.

Results: Based on the obtained results, couple therapy based on choice theory was effective in disillusionment ($P<0.01$) and communication styles ($P<0.01$) of infertile couples.

Conclusion: Given the good effect of choice theory-based couple therapy on marital burnout and communication styles of infertile couples, it is advised that these capacities and training be used in the planning of mental health measures, particularly for infertile couples.

Keywords: Communication styles, Couple therapy, Infertility

Introduction

We have recently witnessed a dramatic change in the reasons for marriage and spouses' expectations of each other. The need for love and intimacy, establishing a cordial relationship with the spouse, and satisfying emotional-psychological needs are among the main new reasons cited for getting married. Marriage is a social phenomenon that not only plays a crucial role in the stability and order of society but also maintains the physical and mental health of people in society. In terms of its continuity and high quality, it is the basis for the formation of a society and the preservation of human emotions that need special consideration (1).

On the other hand, the increasing divorce rate is one of the daunting challenges presented to family life in the present era. In our country, divorce statistics are on the rise and a critical factor associated with this elevation is fertility which is defined as the ability to start and maintain a pregnancy. Infertility is defined as trying to get pregnant with frequent, unprotected sex for at least a year with no success. An estimated 120-180 million

women worldwide aged 18-49 years suffer from this disorder (2). In Iran, the initial infertility rate was 24.9% (3). Infertile women are among the people who run a high risk of psychological personality disorders. Furthermore, marital satisfaction is one of the major factors affecting women's health and one of the major indicators of life satisfaction affecting income, academic achievement, and job satisfaction of couples (4).

Based on studies, the establishment and maintenance of effective communication as one of the important life skills is essential for a satisfactory marriage. The relationship between couples is among the most complex human relationship and none of the human relationships encompasses all biological, economic, emotional, and psychosocial dimensions. In general, marriage requires effective and efficient communication (5). In support of this issue, numerous studies have pointed out that an efficient marital relationship is a strong predictor of marital quality, while a dysfunctional marital relationship is the main source of dissatisfaction (6). Therefore, it can be stated that communication problems are the

most common and destructive challenges in failed marriages (7).

Inefficient communication styles cause important problems of cohabitation to remain unresolved and become a source of repetitive conflict among couples. A marital relationship is a process in which a husband and wife exchange emotions and thoughts, both verbally and nonverbally in the form of listening, pause, facial expression, and gestures (8). Caughlin & Vangelisti (9) assigned the communication styles between couples to three categories, mutual constructive, expectation/withdrawal, and reciprocal avoidance styles. In a mutual constructive style, couples easily discuss their problems and conflicts and seek to solve them and avoid irrational reactions, aggression, and other destructive behaviors. In this style, the expectant spouse is dependent on a person and the withdrawn spouse has a fear of becoming dependent. In reciprocal avoidance style, couples refrain from communicating with each other, and their lives are parallel to each other and their relationships are at a minimum possible or not at all (9).

Infertility issue imposes great stress and suffering on couples' lives, affecting their interpersonal, social, and marital relationships. Frustration and discouragement from gaining a sense of trust and marital commitment in couples' relationships not only affect their marital relationships but also their intimacy and close emotions (10). Marital burnout is defined as a state of physical, emotional, and mental exhaustion that arises in long-term conflict situations with emotional demands (11). In this definition, physical burnout is characterized by decreased energy, chronic fatigue, weakness, and a wide array of physical and mental complaints, while emotional exhaustion includes feelings of helplessness, hopelessness, and deception. Mental burnout refers to the development of negative attitudes toward self, work, and life (12).

Infertility specialists state that the psychological treatment of couples due to infertility is different from other couple problems, and special attention should be devoted to treatment strategies (13). Glasser (14) believes that the choice theory is about opting for better; nonetheless, prior to that, people need to understand the reason behind their bad choices (14). In his view, it is one's perceptions of reality that make up his/her behavior, actions, thoughts, and feelings, not reality itself (15). Glasser's couple therapy aims to reduce external control and the growth of internal control in couples in an attempt to reduce the need for spouse control (i.e., trying to control their own behavior instead of controlling the spouse).

From Glasser's point of view, the best way to resolve marital problems is to change behavior by choosing useful and constructive actions. Behavior change is not based on the principles of behaviorism,

rather it is contingent on choosing those behaviors that improve the relationship between husband and wife. In this regard, changing behavior through one's own choices is easier than changing feelings or cognition (16). Different studies have demonstrated that couples who use constructive conflict resolution strategies and positive interaction patterns in their relationships benefit from higher marital relationship quality, high marital satisfaction, and greater stability in life (17-19).

Considering the increasing number of infertile couples and their major problems in empathy, encouragement, and intimacy, it seems that many of these infertile couples lack sufficient knowledge and skills to properly manage such problems. Such issues can be lessened in the event that infertile couples receive sufficient training in marital counseling based on selection theory. In light of the aforementioned problems, the current study sought to ascertain the efficacy of couple therapy based on choice theory in infertile couples' marital burnout and communication patterns.

Objective

The current study sought to ascertain the efficacy of couple therapy based on choice theory in marital burnout and infertile couples' communication styles.

Methods

This quasi-experimental study was conducted based on a pretest, posttest, control group design with a follow-up period. The statistical population of the study consisted of all infertile couples referred to counseling and treatment centers in Tehran in 2019, among whom 30 were selected by convenience sampling method and randomly assigned to two groups of 15. The couple therapy program based on choice theory was performed weekly, while the control group did not receive any intervention. The two groups responded to empathy and intimacy questionnaires in the pre-test, post-test, and follow-up stages. Based on comparable research, the number of samples was determined with each group of 15 individuals having an effect size of 0.40, a confidence level of 0.95, a test power of 0.80, and a loss rate of 10%. (20). The inclusion criteria were as follows: informed consent to participate in the study, the age range of 30-40 years (this age group was selected since most of the patients referred to counseling and treatment fell in this age range), a minimum education of diploma, receiving infertility treatment by one of the couples (male or female), not using psychotropic drugs and psychiatry at least two weeks before the start of treatment until the end of group sessions, absence of severe physical or mental illnesses. On the other hand, the exclusion criteria entitled absence from two consecutive sessions or three non-consecutive sessions, lack of cooperation with the therapist, and lack of assignments suggested

by the therapist. The following were the ethical considerations for this study: 1- Each subject was given written information about the study and was given the option to participate if they so desired. 2. Subjects received assurances that all data was private and would only be utilized for study. 3. The participants' identities and last names were not registered out of respect for their privacy.

Marital Burnout Questionnaire (CBM): The Marital Burnout Scale was developed by Pines in phrase (21). Test-retest reliability was 0.89 for one month, 0.76 for two months, and 0.66 for four months, internal continuity was measured for most subjects, rendering alpha constant coefficients obtained between 0.91 and 0.93. In Iran, Safipourian et al. calculated the reliability coefficient of the marital distress scale, rendering Cronbach's alpha and split-half coefficients of 0.92 and 0.94, respectively, for the whole scale was. Moreover, they calculated the simultaneous validity and divergence of the scale by calculating the correlation coefficient with the marital intimacy scale, yielding a value of -0.61, which indicates the reliability and validity coefficients of the scale (22).

Communication Styles Questionnaire (CPQ): This questionnaire is a self-assessment tool designed by Christine and Salvai to estimate the marital relationship between couples. This 35-item questionnaire estimates couples' behaviors during three stages of marital conflict. Couples grade each behavior on a 9-point Likert scale ranging from 1 (not possible at all) to 9 (very possible). The questionnaire consists of three subscales: expectance/withdrawal relationship, constructive reciprocal relationship, and mutual avoidance relationship. The relationship between expectation/withdrawal consists of two parts: the expectant man/ withdrawn woman and the

1996 to measure marital distress. This scale consists of 21 articles that measure three components of physical exhaustion (e.g. feeling tired, lax, and having sleep disorders) emotional fall (feelings of depression, hopelessness, trapping), and mental fallout (e.g. feelings of worthlessness, frustration, and anger to the wife). All of these items are rated on a 7-point Likert scale. Level 1 represents the lack of experience of the desired phrase and level 7 signifies the high experience of the desired expectant woman/withdrawn man (23). In a study, Cronbach's alpha coefficients were obtained at 0.70, 0.71, 0.66, 0.51, and 0.52 for mutual constructive model (five questions), mutual avoidance relationship, expectant/withdrawn relationship, expectant female/ withdrawn male, and expectant male/withdrawn female (24).

The terms "mean" and "standard deviation" were employed in descriptive statistics. The analysis of variance (ANOVA) approach was employed to compare quantitative variables between the two groups in accordance with inferential analysis. ANOVA with repeated measurements was also applied. Additionally, the ANCOVA technique was employed to evaluate the variation between pre-test and post-test data as well as to lessen the impact of confounders like gender and age. The aforementioned analysis was done using the SPSS program (version 22).

Results

The frequency and percentage of demographic findings, including age (20-40 years) and education (diploma, bachelor, and master), demonstrate the subjects in two groups.

Table 1. Mean and standard deviation of research variables

Variable	Period	Control		Experimental	
		M	SD	M	SD
Mutual constructive communication	Pre-test	19.62	5.65	18.37	4.52
	Post-test	22.75	5.57	24.31	3.30
Expectant man/ withdrawn woman	Pre-test	18.62	4.24	18.68	2.98
	Post-test	19.25	4.17	16.00	3.28
Expectant woman/ withdrawn man	Pre-test	15.31	4.28	16.06	5.07
	Post-test	15.75	4.89	15.43	4.39
Reciprocal avoidance communication	Pre-test	22.06	3.10	18.50	4.27
	Post-test	23.43	2.44	14.75	3.33
Marital Burnout	Pre-test	94.18	10.02	81.50	15.43
	Post-test	102.00	8.50	75.87	14.84

Levine's F value for equality of variances of research variables in the post-test of the experimental and control groups indicates that the variance of research variables among the groups is

unequal; therefore, the condition for implementing covariance analysis is established .

Table 2. Multivariate covariance analysis of post-test scores of marital burnout and communication patterns with couple therapy based on choice theory

	Variables	SS	df	MS	F	sig	Eta
Group	Mutual constructive communication	49.18	1	49.18	7.64	0.001	0.22
	Expectant man/withdrawn woman	54.08	1	54.08	74.18	0.001	0.74
	Expectant woman/withdrawn man	59.56	1	59.56	47.11	0.001	0.64
	Reciprocal avoidance communication	75.59	1	75.59	59.97	0.001	0.69
	Marital Burnout	2190.08	1	2190.08	347.92	0.001	0.92

As illustrated in Table 3, couple therapy based on choice theory had statistically significant effects on mutual constructive communication pattern ($P<0.001$, $F=7.64$), expectant male/withdrawn woman ($P<0.001$, $F=74.18$), female withdrawal rate ($P<0.001$, $F=47.11$) and mutual avoidance pattern ($P<0.001$, $F=59.97$). Eta square value also demonstrated that about 22% of the variance of the mutual constructive model, 74% of the expectant male/withdrawn woman, 64% of the expectant woman/withdrawn man, and 69% of the pattern of mutual avoidance are explained by couple therapy based on choice theory.

Discussion

The purpose of the current study was to evaluate the efficacy of choice theory-based couple therapy on infertile couples' marital burnout and communication patterns. The findings revealed that choice theory-based couple therapy was successful in treating infertile couples' marital burnout and communication patterns. The finding of this study was in accordance with those reported by Haji Adineh & Kalhornia Golkar (25), Moatamedy et.al (26), and Davaie Markazi et.al (27).

In explaining the effectiveness of couple therapy based on choice theory in the quality of the marital relationship, it can be stated that by creating a supportive atmosphere, suggesting trust in meetings, and teaching the basic concepts of choice theory, couples are convinced that if they want to have a satisfactory relationship, they should be sensitive to each other's needs and try to understand each other's qualitative world, and therefore, it is necessary for the treatment session. Furthermore, in this approach, couples are asked to pay attention to the quality of the time they spend together, choose activities that meet the needs of both of them, and refrain from harassing behaviors, such as blame and extreme

discussion. As a result of assigning such times to each other, the quality of the relationship between them improves, causing couples to gain a more positive and pleasant perception of themselves, each other, and their marital relationship (26).

It can be explained that Glasser's emphasis on accepting responsibility for each person's behavior helps couples to investigate their behavior, instead of addressing the behavior of the spouse and putting him/her under scrutiny, thereby improving their relationships. Reality therapy counselors based on Glasser's concepts try to increase marital trust and intimacy in their clinical interventions by increasing responsibility in couples, improving communication skills, and strengthening the couples' sense of commitment. Another factor that Glasser considers effective in strengthening and stabilizing marital relationships is couples' attention to each other's desires and needs; therefore, in this study, couples were instructed to pay attention to each other's desires and needs. They learned to satisfy their own needs and those of their spouses using loving behaviors (27). Couples were helped to review and evaluate the fatal behaviors they have used so far by completing the relevant worksheets and assessing their effect on their marital relationships. The use of loving behaviors, such as effective listening, encouragement, respect, trust, and acceptance enables couples to communicate better and continue these behaviors. They understand that the use of these methods is very useful in communicating and satisfying their needs and will bring them peace of mind (28). In couple therapy based on choice theory, couples learn that they must exhibit some behaviors that improve their relationship for a successful marriage and a lasting marital life (30). Enrichment of marriage (following the principles and concepts of choice theory) can play an effective role in choosing a responsible lifestyle, increasing marital intimacy and

adjustment, reducing marital distress, improving couples' sexual relationships, and preventing marital break-up (31).

The limitations faced in the present study should be considered in generalizing the results. Due to the COVID-19 pandemic and virtual implementation of research questionnaires, there was no supervision on respondents' level of perception, as well as their response situation and conditions. It is suggested that in future studies each questionnaire be completed individually in person or via voice/video calls under the supervision of researchers. In this study, the principles and concepts of the choice theory were used to strengthen the loyalty of couples and teach them that each person's behavior comes from within and can be controlled only by him/herself. Couples participating in this study learned that by accepting their responsibility in cohabitation and applying family life skills, they will be able to increase their trust in their spouse and further strengthen the sense of commitment and loyalty in marital life.

Conclusion

It is advised to employ these skills and training in developing mental health measures, especially for infertile couples, given the good impact of couple therapy based on choice theory on the discomfort and communication patterns of infertile couples.

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References

1. Di Spiezio Sardo A, Di Carlo C, Minozzi S, Spinelli M, Pistotti V, Alviggi C, De Placido G, Nappi C, Bifulco G. Efficacy of hysteroscopy in improving reproductive outcomes of infertile couples: a systematic review and meta-analysis. *Human reproduction update*. 2016 Jun 1;22(4):479-96. <https://doi.org/10.1093/humupd/dmw008>
2. Frederiksen Y, O'Toole MS, Mehlsen MY, Hauge B, Elbaek HO, Zachariae R, Ingerslev HJ. The effect of expressive writing intervention for infertile couples: a randomized controlled trial. *Human Reproduction*. 2017 Feb 1;32(2):391-402. <https://doi.org/10.1093/humrep/dew320>
3. Vahidi S, Ardalan A, Mohammad K. Prevalence of primary infertility in the Islamic Republic of Iran in 2004-2005. *Asia Pacific Journal of Public Health*. 2009 Jul;21(3):287-93. <https://doi.org/10.1177/1010539509336009>
4. Martin J, Yi Y, Alberola T, Rodríguez-Iglesias B, Jiménez-Almazán J, Li Q, Du H, Alama P, Ruiz A, Bosch E, Garrido N. Comprehensive carrier genetic test using next-generation deoxyribonucleic acid sequencing in infertile couples wishing to conceive through assisted reproductive technology. *Fertility and sterility*. 2015 Nov 1;104(5):1286-93. <https://doi.org/10.1016/j.fertnstert.2015.07.116>
5. Ten Brinke L, Porter S, Korva N, Fowler K, Lilienfeld SO, Patrick CJ. An examination of the communication styles associated with psychopathy and their influence on observer impressions. *Journal of Nonverbal Behavior*. 2017 Sep;41(3):269-87. <https://doi.org/10.1007/s10919-017-0252-5>
6. Barnett MD, Johnson DM. The perfectionism social disconnection model: The mediating role of communication styles. *Personality and Individual Differences*. 2016 May 1; 94:200-5. <https://doi.org/10.1016/j.paid.2016.01.017>
7. House J. Communication Styles in English and German. *The International Encyclopedia of Intercultural Communication*. 2017 Nov 29:1-10. <https://doi.org/10.1002/9781118783665.ieicc0240>
8. Kim BS, Park YS. Communication styles, cultural values, and counseling effectiveness with Asian Americans. *Journal of Counseling & Development*. 2015 Jul;93(3):269-79. <https://doi.org/10.1002/jcad.12025>
9. Caughlin JP, Vangelisti AL. An individual difference explanation of why married couples engage in the demand/withdraw pattern of conflict. *Journal of Social and Personal Relationships*. 2000 Aug;17(4-5):523-51.
10. Bidgoli ER, Tamannaefar M. The Prediction of Marital Burnout Based on Personality Traits. *International Journal of Scientific Study*. 2017;5(4):647-52.
11. Boone AR. Couches and mattresses: The next recoverables?. *RESOURCE RECYCLING*. 1994;13:45-.
12. Jesse MT, Shkokani L, Eshelman A, De Reyck C, Abouljoud M, Lerut J. Transplant surgeon burnout and marital distress in the sandwich generation: the call for organizational support in family life. In *Transplantation proceedings 2018 Dec 1 (Vol. 50, No. 10, pp. 2899-2904)*. Elsevier. <https://doi.org/10.1016/j.transproceed.2018.01.053>
13. Bishai D, Grossbard S. Far above rubies: Bride price and extramarital sexual relations in Uganda. *Journal of Population Economics*. 2010 Sep;23(4):1177-87. <https://doi.org/10.1007/s00148-008-0226-3>
14. Robey PA, Wubbolding RE, Malters M. A comparison of choice theory and reality therapy to Adlerian Individual Psychology. *The Journal of*

- Individual Psychology. 2017;73(4):283-94. <https://doi.org/10.1353/jip.2017.0024>
15. Davaie Markazi M, Karimi J, Goodarzi K. Investigating the Effectiveness of Couple Therapy based on Reality Therapy and Emotionally Focused Therapy (EFT) on Couples' Happiness and Resilience. *Journal of Counseling Research*. 2021 May 10;20(77):89-121. <https://doi.org/10.18502/qjcr.v20i77.6143>
 16. Afghari N, Yazdkhasti F, Mehrabi-Koushki H, Azimi A. Comparison of the Effect of Group Couple Therapy Based on Reality Therapy and Acceptance and Commitment Therapy on Perfectionism and Adjustment of Couples' Needs. *Journal of Health System Research*. 2021 Jan 10;16(4):243-50.
 17. Perrone-McGovern KM, Oliveira-Silva P, Simon-Dack S, Lefdahl-Davis E, Adams D, McConnell J, Howell D, Hess R, Davis A, Gonçalves ÓF. Effects of empathy and conflict resolution strategies on psychophysiological arousal and satisfaction in romantic relationships. *Applied psychophysiology and biofeedback*. 2014 Mar 1;39(1):19-25. <https://doi.org/10.1007/s10484-013-9237-2>
 18. Lavner JA, Karney BR, Bradbury TN. Does couples' communication predict marital satisfaction, or does marital satisfaction predict communication?. *Journal of Marriage and Family*. 2016 Jun;78(3):680-94. <https://doi.org/10.1111/jomf.12301>
 19. Javidi, Nasir al-Din, Soleimani, Ali Akbar, Ahmadi, Khodabakhsh, Samadzadeh, Mena. The effectiveness of emotionally focused couples therapy (EFT) to improve communication patterns in couples. *Journal of Research in Behavioural Sciences*. 2013;11(5):402-10.
 20. Buruck G, Dörfel D, Kugler J, Brom SS. Enhancing well-being at work: The role of emotion regulation skills as personal resources. *Journal of occupational health psychology*. 2016;21(4):480. <https://doi.org/10.1037/ocp0000023>
 21. Akbari N, Samani S. Forecasts Bbased on Marital Dissatisfaction and Sexual Dysfunction, Female in Shiraz City. *Quarterly journal of women and society*. 2018 Aug 23;9(34):19-34.
 22. Safipouriyan S, Ghadami A, Khakpour M, Sodani M, Mehrafarid M. The effect of group counseling using interpersonal therapy (IPT) in reducing marital boredom in female divorce applicants. *JNE*. 2016;5(1):1-11. [Persian]
 23. Christensen A, Sullaway M. Communication patterns questionnaire, university of California. Los Angeles: Unpublished manuscript. *Journal of Clinical Psychology*. 1984;66:53-88. <https://doi.org/10.1037/t02529-000>
 24. Duba D, Jill D, Graham MA, Britzman M, Minatrea N. Introducing the "Basic Needs Genogram" in Reality Therapy-based marriage and family counseling. *International Journal of Reality Therapy*. 2009;28(2):15.
 25. Haji Adineh S, Kalhornia Golkar M. Effectiveness of Group Training Based on Choice Theory on Marital Adjustment and Sexual Satisfaction of Couples. *Journal of Research in Behavioural Sciences*. 2019;17(2):193-204.
 26. Moatamedy A, Khaki A, Farahbakhsh K, Esmaaili M, Bejestani HS. The Evaluation of the Effectiveness of Couple-Therapy based on Ecological Model in Reducing Marital Conflicts. *Executive Editor*. 2018;9(3):162. <https://doi.org/10.5958/0976-5506.2018.00202.4>
 27. Davaie Markazi M, Karimi J, Goodarzi K. Investigating the Effectiveness of Couple Therapy based on Reality Therapy and Emotionally Focused Therapy (EFT) on Couples' Happiness and Resilience. *Journal of Counseling Research*. 2021;20(77):89-121. <https://doi.org/10.18502/qjcr.v20i77.6143>
 28. Abbasi H, Ahmadi SA, Fatehizadeh M, Bahrami F. Effect of Couple Therapy Based on the Choice Theory on Social Commitment of Couples. *J Educ Community Health*. 2017;4(2):3-10. <https://doi.org/10.21859/jech.4.2.3>
 29. Banks SG. Using choice theory and reality therapy in premarital counseling. *Contemporary Issues in Couples Counseling*. 2012:211-25.
 30. Robey PA. Reality therapy and choice theory: An interview with Robert Wubbolding. *The Family Journal*. 2011;19(2):231-7. <https://doi.org/10.1177/1066480710397129>