Published online 2017 June 3.

Research Article

The Effectiveness of Personal Construct Therapy on Marital Satisfaction: A Quasi-Experimental Study

Hossein Keshavarz-Afshar, Fatimah Nosrati, Esfandiar Azad-Marzabadi, Noshin Eslahi, 4

Mohammad Gholami-Fesharaki,⁵ and Fahimeh Ghahvehchi-Hosseini^{6,*}

- ¹Assistant Professor, Department of Educational Psychology and Counseling, University of Tehran, Tehran, Iran
- ²Assistant Professor of Psychology and Education of Exceptional Children, University of Tehran, Tehran, Iran
- ³Behavioral Sciences Research Center, Baqiatallah University of Medical Sciences
- ⁴Azad University
- 5 Assistant Professor of Biostatistics, Biostatistics Department, Faculty of Medical Sciences, Tarbiat Modares University, Tehran, Islamic Republic of Iran
- ⁶Behavioral Sciences Research Center, Baqiatallah University of Medical Sciences, Tehran, Iran

Received 2016 August 14; Revised 2017 January 31; Accepted 2017 March 01.

Abstract

Background: Marital satisfaction is as an important factor in family function. Considering incompatibility between couples, some approaches such as construct therapy could be effective in marital satisfaction.

Objectives: This study aimed to evaluate the effectiveness of personal construct analysis model in marital satisfaction.

Methods: The present research was a quasi-experimental study with pretest-posttest and fallow up design. The population was consisted of couples referring to counseling centers in Tehran (Iran) due to marital conflict during 2011-2013. The participants were randomly assigned to two groups (Treatment (T) and Control (C)) of 15 pairs each. The treatment group received 10 weekly sessions of intervention. The data were collected by enrich marital satisfaction short form 47-item questionnaire and analyzed statistically using analysis of variance.

Results: The mean differences in variables including personality issues (T = 2.96, C = -0.6, P < 0.001), communication (T = 4.83, C = -0.07, P < 0.001), conflict resolution (G1 = 2.7, C = -1.03, P < 0.001), financial management (T = 1.2, G2 = -0.77, P < 0.001), leisure activities (T = 0.6, G2 = -0.76, P < 0.001), sexual relationship (T = 0.6, C = -0.76, P < 0.001), children and parenting (T = 2.6, C = -0.54, P < 0.001), family and friends (T = 1.9, C = -0.66, P < 0.001), and religious orientation (T = 0.83, C = -0.37, P < 0.001) were positive in the treatment group and negative in the control group.

Conclusions: The present study demonstrated that personal construct analysis model can be used as an alternative intervention for marital distress.

1. Background

The couples' sense of satisfaction with marriage and marital relationship plays an important role in the normal family function. Regardless of the fact that the term "marital satisfaction" has been quite challenging to define, its true definition can perhaps be better understood when assessed along the lines with words such as compatibility and happiness, which have been applied to determine marital life quality (1). In fact, although defining and describing marital satisfaction appears as rather simple, the essence of its existence and absence renders it complex in nature. Marital satisfaction is a significant, complex aspect of marital relationship. In other words, among the marital components, satisfaction perceived by couples with their relationship is one of the vital dimensions (2). Nevertheless, statistics of divorce, which can be considered as the most valid index of marital distress, show that marital satisfaction is not easily obtained (3).

Marital satisfaction and dissatisfaction are affected by several factors, including a person's expectation from life, personality features, emotions, cognition, thoughts and even individual perception of the self and others. Cognitive factors are effective in marital relationships. To specify precisely, marital satisfaction is an emotional-cognitive function that includes the mental evaluation a person has about his/her marital relation (4).

Moreover, in the applied psychology field, different approaches have been developed in couple therapy to reduce conflicts and distress among couples (5). It is also worth mentioning that the majority of such approaches have aimed to rectify the relationship between couples and even reduce marital conflicts to increase marital satisfaction as the desired outcome. With respect to the complexity of marital satisfaction and considering the mentioned issues, a vital need is to pay attention to both individual and interpersonal factors. Personal construct psychology, in this case, seems to be quite reasonable in meeting our

^{*}Corresponding author: Fahimeh-Ghahvehchi-Hosseini, Behavioral Sciences Research Center, Baqiatallah University of Medical Sciences, Tehran, Iran. E-mail: paria_gh66@yahoo.com

need. The origin of this approach in psychology has been stated in the best form in Goerge Kely's theory (6). From Kely's point of view, the most effective way to understand human behavior is to consider one as a scientist. Based on his assumption, he was able to utilize this insight as a guide in treatment tasks, which in turn paved the way for his theory to be included as a subset of constructivism theories (7).

According to the personal construct theory, human beings intend to create meaning in their lives through experiments and even by refining their theories. Additionally, they tend to constantly search for different approaches in predicting future events (8). The need for anticipation is fundamental and shows itself in every aspect of human behavior. Indeed, it may prove to be rather difficult to ponder upon an action that, at the very least, does not relate to an implicit anticipation about how a fact is organized. Since a great part of human life is associated with social interaction, this desire to anticipate has a special importance in interpersonal events. Therefore, as evident as it may seem, almost all social interactions require a hypothesis to be made along with anticipation (7).

Kelly (9) used the personal construct concept through which these anticipations are made. Construct is a concept that one applies to categorize events and design a set of behaviors.

In personal constructs psychology, a human's perception of the world is contingent upon individual and complex systems, mainly since humans interpret their experiences (10). Granted that these interpretations and meanings are more or less unique (individuality), they are in part akin to those of other individuals, as well (commonality) (9). In this regard, not only do people create their interpretations of the world and behave accordingly, but they also make hypotheses about other individual's interpretations. Every single person who interprets another's interpretation process can thus play a role in that person's social process.

To make social relationships, including marital relations, people ought to make constructs about the others' constructs (interpret others' interpretation, read others' thought) to be able to understand the others' behaviors and thoughts. Kelly did not require that people interpret the same event in an identical way, but he said that they must interpret others' views well (11).

Up until now, personal construct psychology has been used in the areas of anger treatment (12), stress disorder after harm (13), children's problems (14), substance abuse (15), schizophrenia (16), and problems of intimate interpersonal relations (17). More importantly, attempts have been made by researchers such as Procter (18) in order to develop a family therapy model in accordance with personal

construct psychology. By taking the mentioned issues into account, this research delves deep in finding the impact that a personal construct therapy may have on marital satisfaction.

2. Methods

The present study was a quasi-experimental research that included two specific groups. A pretest was performed on both groups one week before starting the couple therapy intervention. The posttest was administered at the last session. A follow-up test was additionally taken from both groups 3 months after the end of the intervention program. The statistical population of the present research included all candidate couples referring to one of the counseling centers of 5th district, Tehran, Iran.

Sample size was calculated as 28 for each group according to Cohen effect size (α = 0.05, β = 0.1, effect size = 0.80). Considering 20% attrition rate, 30 subjects were designated for each group.

Couples taking part in this study were selected among people who read newspaper announcement or referred by doctors. The announcement was published in the board section of a local newspaper: "Married couples are needed: couples who have problems in their marriage are welcome to a research at (location). Those who were interested in were asked to call the clinic for more details. People who called were explained that the study is to determine the effectiveness of a marital therapy and they may be assigned to a treatment group or to a waiting group for 10 weeks. The exclusion criteria were: presence of emotional or physical abuse, substance abuse problems, and primary sexual problems (Figure 1). People who were interested in the participation in the research completed a demographic questionnaire and marital satisfaction scale (ENRICH) as pretest. Then, they were informed about their group of assignment. The Ethics Committee of Research and Technology vice chancellor of Baqiatallah University of Medical Sciences confirmed the study (No. 92141).

2.1. Randomization and Intervention

Out of 47 candidate couples, 36 took part in the study. They were equally allocated to either treatment or waiting control groups using block randomization. 6 of the subjects dropped out from both the groups (3 from each group). After 10 sessions of intervention, the subjects in both groups were evaluated by posttest. A male and a female family counselor volunteered to serve as therapists in return for clinical supervision. They had previous experience in conducting couple therapy. Each therapist was provided with a copy of the personal construct psychology text, which was used as treatment manual (See Table 1).

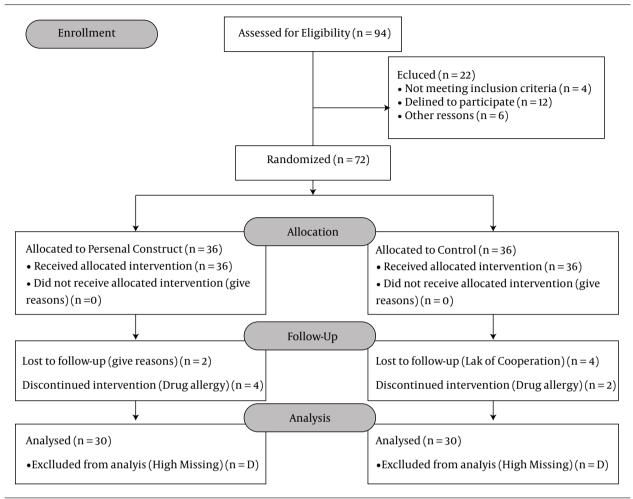


Figure 1. Study Follow Diagram

2.2. Instrument

The tool for data gathering was the 47-item short form of the ENRICH marital satisfaction scale as a standard questionnaire. Soleimanian (19) have calculated and reported the internal correlation of the long form as 0.93 and the short form as 0.95. Mahdavian (20) estimated the values of 0.93 for men and 0.94 for women by working on the test validity using Pierson's correlation coefficient and the retest method with an interval of 1 week. The coefficients for subscales of idealistic distortion, marital satisfaction, communication, conflict resolution, personality issues, leisure activities, financial management, sexual relationship, family and friends, children and parenting, religious orientation, and equalitarian roles in male and female groups were 0.72, 0.76, 0.76, 0.85, 0.81, 0.76, 0.63, 0.87, 0.69, 0.72, and 0.62, respectively. Alpha coefficient of the 48-item questionnaire in Mirkhashi's research was obtained as 0.92.

2.3. Statistical Analysis

All statistical analyses were carried out in SPSS18 (SPSS Inc., Chicago IL). Continuous variables were expressed as mean \pm SD. The data were checked for normal or nonnormal distribution. Categorical variables were presented as frequency (percentage).

Normal distribution of numeric variables was assessed with Kolmogorov-Smirnov test.

In this study, ordinary and Bootstrap test, t test or Mann-Whitney U test, Paired Sample t test or Wilcoxon Signed Ranks Test, and ANCOVA and Chi square tests were applied to compare the two groups. A P value < 0.05 was considered to be significant.

3. Results

In this study, the youngest couple was 22 years old and the eldest one was 45 years old. The average length of marriage of participants was 3.62 years.

As shown in Table 2, there were no significant differences in demographic variables between subjects assigned to treatment and control groups.

The mean differences between the pretest and posttest scores in the control (C) and treatment (T) groups are presented in Table 3. As can be seen, the mean differences of variables including personality issues (T = 2.96, C = -0.6), communication (T = 4.83, C = -0.07), conflict resolution (G1 = 2.7, C = -1.03), financial management (T = 1.2, G2 = -0.77), leisure activities (T = 0.6, G2 = -0.76), sexual relationship (T = 0.6, C = -0.76), children and parenting (T = 2.6, C = -0.54), family and friends (T = 1.9, C = -0.66), and religious orientation (T = 0.83, C = -0.37) were positive in the treatment group and negative in the control group.

4. Discussion

The current study aimed to determine the effectiveness of personal construct therapy in marital satisfaction among couples referring to counseling centers in Tehran.

The results showed that construct therapy is effective in increasing marital satisfaction of couples who had marital conflicts.

Personal construct psychology believes that marital dissatisfaction is a set of dysfunctional constructs that project themselves in the form of impenetrable predictions. These dysfunctional constructs intend to be confirmed as couples look for evidence to support their constructs in life and even impose such constructs on new information, ultimately leading to the formation of conditional beliefs and thoughts signifying tremendous impacts on their performance in cognitive, affective, and interpersonal areas (9).

It seems that personal constructs approach, due to working on psychological themes and personal constructs of couples with marital incompatibility, are relatively helpful in modifying beliefs and thoughts. Construct therapy provides an opportunity for couples to understand each other's meaning of the world and perhaps for the very first time realize mutual perceptions about each other. This can inadvertently be the first step in treating marital incompatibility. The other explanation that can be mentioned for personal construct effectiveness in promoting marital satisfaction is that the treatment focuses on communicative levels of marital messages. In this regard, Gregory Batson has argued that we constantly have relations in two content and communicative levels with each other. Even animals dispute among themselves in a fun manner and transmit this message that (this is a game). We constantly communicate with each other about our roles in relations through gesture, appearance situation, face state, and tone as lingual messages. The constructs covering the relationships do not need a verbal label necessarily. Talking about how people interpret relations and encouraging awareness often create an opportunity for tackling problems and long-term challenges. In communication and conversation with one another, people more often do not use personal constructs. To be exact, a woman used the term "miserly" for her husband or a man used the term "useless" for himself. These constructs were revolving around actions, and forming them about each other can obtain all of them easily in recurrent models of interpretation and explanation. It is possible that people complaining about a reactive action, with a supportive way of the label, make those labels sustainable to some extent (9).

The results of this study are in line with those of studies of Kremsdorf (21), Epstein, Chen (22), Zolfaghari and Fatehi-Zadeh (23), Molhtari, Hoseinian, Bahrami et al. (2009), Yoosefi, Etemadi and Bahrami et al. (24), and Beck and Imery (25).

The results of this research in particular can be applied in counseling centers, and specific personal construct analysis models can be regarded as a new step in applying these treatments on couples. Considering that this treatment was performed on couples in Tehran, it is recommended that a similar study be performed in different cities to examine its effectiveness in various angles of marital life. One of the limitations was the small sample size, which makes it difficult to generalize the findings.

References

- Yousefi R, Abedin A, Tirgiri A, FathAbad J. The effectiveness of intergrate education based on schema in increasing marital satisfaction. Clin Psychol Mag. 2010;3(7).
- Taniguchi ST, Freeman PA, Taylor S, Malcarne B. A study of married couples' perceptions of marital satisfaction in outdoor recreation. *J Exp Educ.* 2006;28(3):253-6. doi: 10.1177/105382590602800309.
- 3. Halford WK, Sanders MR, Behrens BC. Can skills training prevent relationship problems in at-risk couples? Four-year effects of a behavioral relationship education program. *J Fam Psychol.* 2001;**15**(4):750–68. doi: 10.1037/0893-3200.15.4.750. [PubMed: 11770479].
- Sprecher S. Relationship initiation and formation on the internet. *Marriage Fam Rev.* 2009;45(6-8):761-82. doi: 10.1080/01494920903224350.
- Hassan Abadi H, Mojarad S, Soltanifar A. The study of effectiveness emotional treatment on marital satisfaction and positive emotions of couples who have relationships infidelity. *Psychol Res Consult*. 2011;1(2):25–38.
- Kelly G. The psychology of personal constructs: Volume two: Clinical diagnosis and psychotherapy. Routledge; 2003.
- Neimeyer RA, Neimeyer GJ. Constructivist assessment: What and when. Sage Publications; 1993.
- 8. Winter D. International handbook of personal construct psychology.; 2005. pp. 265–72.The Evidence Base for Personal Construct Psychotherapy.
- $9. \ \ Kelly G. \ Personal \ construct \ psychology. \ New \ York: \ Norton; 1955.$

Table 1. Framework of the Couple Therapy Sessions Based on Personal Constructs (Derived from (9))

Sessions	Contents
1	Relationship establishing, initial evaluation, and presenting treatment logic
1	Step1: establishing a good relationship with clients and presenting rules, objectives, and numbers of sessions
	Family plan
2	Objectives:
	Informing couples about communication models, people's limits and family members' emotional situation to each other
	Promoting couples' awareness about the existence of possibilities to create concerned changes to achieve special objectives
	Attention to comments and criticism
	Objectives:
	Increasing couples' ability for listening to their spouses
	Listening to wife/husband's criticisms with respect
	Developing and stabilizing this attitude in wife/husband that he/she is honorable as a sole and unique individual
	Putting yourself in the place of the other one
	Objectives:
4	Respecting different opinions
	Program planning for promoting wife/husband roles
	Family values
5	Objectives:
	Determining couples' interest in playing wife/husband roles
6	Finding factors that make playing wife/husband roles difficult for them
	Family root and identity
	Objectives:
	Reminding instances that each couple knows about his/her partner's ancestors
	Reflecting this issue of how family history impacts family
7	Affection and authority in family
	Objectives:
	Reminding and reviewing the way of expressing love and affection in family
	Discovering each family's reaction to anger and disappointment
ran Red Crescent Me	ed J. 2017; 19(6):e14317. Discovering the way of expressing affections in family

affections in family

Design of constant roles

Presenting a system for new

Objectives:

- Neimeyer RA, Epting FR, Krieger SR. Personal constructs in thanatology: An introduction and research bibliography. *Death Educ.* 2007;7(2-3):87-94. doi:10.1080/07481188308252157.
- 11. Ellis A, Abrams M, Abrams L. Theories of personality. Sage Press; 2008.
- Cummins P. Working with anger: A constructivist approach. John Wiley & Sons; 2006.
- Sewell KW. An approach to post-traumatic stress. 2005:223-31. doi: 10.1002/0470013370.ch21.
- Ravenette T. International handbook of personal construct psychology.; 2005. pp. 283–93. Constructive intervention when children are presented as problems.
- Klion RE, Pfenninger DT. Personal construct psychotherapy of addictions. *J Subst Abuse Treat.* 1997;14(1):37-43. doi: 10.1016/S0740-5472(96)00130-4. [PubMed: 9218235].
- Bannister D, Fransella F. A grid test of schizophrenic thought disorder. Br J Soc Clin Psychol. 1966;5(2):95–102. doi: 10.1111/j.2044-8260.1966.tb00961.x. [PubMed: 5939462].
- Leitner LM. Terror, risk, and reverence: Experiential personal construct psychotherapy. Int J Personal Constr Psychol. 1988;1(3):251–61. doi: 10.1080/i0720538808409398.
- Procter H. Personal construct psychotherapy. Advances in theory, practice and research.; 2005. pp. 94-108. Techniques of personal construct family therapy.
- Soleimaniyan A. A study of the non-logical effects on marital is no dissatisfaction [In Persian]. Tehran: Tarbiat Moallem University; 1994.
- 20. Mahdavian F. The effect of marital satisfaction and relationship education and mental health, psychiatric. 1997.
- Kremsdorf R. Anticipating personal construct psychology. Lincoln, NB: Nebraska Press; 1985. pp. 216–24. An extension of fixed-role therapy with a couple.
- 22. Epstein NB, Chen F, Beyder-Kamjou I. Relationship standards and marital satisfaction in Chinese and American couples. *J Marital Fam Ther.* 2005;**31**(1):59–74. [PubMed: 15739967].
- Zolfaghari M, Fatehi-Zadeh M, Abrdi MR. Determining relationships between early maladaptive schemas and marital intimacy among Mobarakeh Steel Complex personnel [In Persian]. J Fam Res. 2008;4(3):261-47.
- 24. Yousefi N, Etemadi O, Bahrami F, Al-Sadat Fatehezade M, Ahmadi SA, Beshlideh K. Structural relationships between self-differentiation and subjective wellbeing, mental health and marital quality" fitting bowen's theory. *Iran J Psychiat Behav Sci.* 2009;3(2):4-14.
- 25. Beck A, Emery G, Greenberg RL. Anxiety disorders and phobias: A cognitive perspective. New York: Basic Books; 1985.

Table 2. The Demographic Variables According to the Groups^a

Variables		Group				
	Personal co	onstruct (n = 30)	Control	(n=30)		
Continuous variables	Mean	SD	Mean	SD		
Age	30.07	6.30	31.30	4.52	0.391	
length of marriage	3.62	2.85	3.53	2.19	0.297	
Categorical variables	No.	%	No.	%		
Sex (Male)	15	50	15	50%	> 0.999	
University education	19	63.3	17	56.7	0.792	

 $Abbreviation: SD, Standard \ Deviation. \\ {}^{a}Continuous \ data \ analyzed \ using \ independent \ sample \ t-test \ or \ Mann \ -Whitney \ U. \ Categorical \ variables \ analyzed \ using \ Chi \ square \ test. \\$

 $\textbf{Table 3.} \ Pretest\ and\ Posttest\ scores\ of\ Study\ Variables\ According\ to\ the\ Groups^a$

Variables	Pretest		Posttest		P Value 1 ^b	Diff	P Value 2 ^c
	Mean	hSDh	hMean	SD			
Personality Issues							
Personal Construct	10.27	1.68	13.23	1.48	< 0.0001	2.96	< 0.0001
Control	11.37	1.67	10.77	1.55	0.007	-0.6	
	P value	0.007	P value	< 0.0001			
Communication							
Personal Construct	10.67	1.95	15.50	1.53	< 0.0001	4.83	< 0.0001
Control	10.87	1.87	10.80	1.58	0.836	-0.07	
	P value	0.560	P value	< 0.0001			
Conflict Resolution							
Personal Construct	12.10	1.90	14.80	1.69	< 0.0001	2.7	< 0.000
Control	12.50	1.78	11.47	1.81	0.001	-1.03	
	P value	0.619	P value	< 0.0001			
Financial Management							
Personal Construct	14.67	3.24	15.87	2.47	< 0.0001	1.2	< 0.000
Control	14.57	2.74	13.80	2.58	0.002	-0.77	
	P value	0.923	P value	0.007			
Leisure Activities							
Personal Construct	16.47	2.00	17.07	1.87	0.001	0.6	< 0.000
Control	15.83	1.74	15.07	1.41	0.002	-0.76	
	P value	0.168	P value	< 0.0001			
Sexual Relationship							
Personal Construct	13.73	2.48	15.93	1.91	< 0.0001	2.2	< 0.000
Control	13.57	2.01	12.90	2.12	0.029	-0.67	
	P value	0.219	P value	< 0.0001			
Children and Parenting							
Personal Construct	12.13	1.76	14.73	1.60	< 0.0001	2.6	< 0.0001
Control	13.47	2.10	12.93	2.16	0.044	-0.54	
	P value	0.031	P value	< 0.0001			
Family and Friends							
Personal Construct	13.30	2.38	15.20	1.92	< 0.0001	1.9	< 0.000
Control	14.03	1.73	13.37	1.81	0.008	-0.66	
	P value	0.204	P value	0.001			
Religious Orientation							
Personal Construct	13.97	2.14	14.80	1.90	< 0.0001	0.83	0.001
Control	14.70	1.91	14.33	1.88	0.173	-0.37	
	P value	0.204	P value	0.478			

Abbreviation: SD, Standard Deviation.

^aP value: base line and posttest scores based on the groups analyzed using independent sample t-test or Mann-Whitney U.

^bP value 1: The difference between pretest and posttest scores in each group analyzed using Paired Sample t-test or Wilcoxon Signed Ranks Test.

^cP value 2: Unequal variables between the two groups analyzed using ANCOVA.