



A theory-based educational intervention impact on reduction of divorce intention in Iran

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Abstract

This randomized controlled trial (RCT) with pretest-posttest design addressed the effect of a theory of planned behavior (TPB) based educational intervention on divorce petition withdrawal. The study population consisted of 140 couples applying for divorce in a judiciary counseling center in Yazd, Iran. Participants were assigned to two groups with 70 individuals in each. The intervention included four educational sessions in which TPB based contents were presented. The data were analyzed by using chi-squared test and covariance analysis. There was no significant difference in demographic characteristics between the two groups. The mean behavioral intention scores after the intervention decreased among the intervention group whereas no significant changes were detected among the control group. Posttest differences were significant. 19.3% of the covariance in posttest scores was explained by the educational intervention ($p < 0.01$). Subjective norms and attitude toward divorce decreased only among the intervention group whereas perceived behavioral control scores did not change among both groups. However, no significant difference at the posttest was observed in mean attitude, subjective norms, and perceived behavioral control scores between the two groups. Education can affect the intention of couples toward divorce petition. More appropriate educational protocols can be developed for couples in counseling centers by planning for and making necessary coordination with the judiciary; TPB can provide more opportunities for divorce applicants to help them make more informed decisions.

Keywords Educational intervention · Theory of planned behavior · Divorce petition

Introduction

Available evidence suggests that the high prevalence of disrupted marital relationships across the world adversely affects both physical and mental health in families (Halford and Snyder 2012). Divorce can cause different types of difficulties and psychological traumas among the affected families (Hahlweg and Richter 2010). Instead of exhibiting positive

behaviors such as active listening and empathy, they are more likely to display negative attitudes and behaviors like criticism, contempt, and disrespect (Revenson et al. 2005).

In marital conflicts, the desire to divorce is not usually equal, and one partner may decide to divorce while the other one hopes for reconciliation. This difference may persist in marital life and after divorce (Bradbury et al. 2000). Studies have shown that couples' positive interactions lead to

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desirable outcomes by creating negative attitudes toward divorce. Training communication skills for couples helps them to achieve marital satisfaction (Rahnama and Mohammadi 2015).

In recent years, the role of cognitive factors in understanding marital relationships has drawn much attention. These factors are mainly concerned with the ability to analyze one's own and others' behaviors (Hilt 2004). Although therapeutic approaches, counseling, and training may help couples to resolve marital problems, other approaches including educational interventions should also be taken into account (Khaki et al. 2017). Mandemakers and Kalmijn developed a multi-dimensional model of couple therapy. They showed that training courses could be designed for specific varieties of conflict and implemented an ecological training model (Mandemakers and Kalmijn 2014). In a study on the effectiveness of combined positivist techniques, training appeared to increase marital satisfaction in married females. Combined techniques can include Seligman's optimism, identifying the strengths and abilities of individuals (Peterson et al. 2006) and Ellis's approach, identifying destructive thoughts and irrational beliefs in order to change them (Ellis and Wight 1997). Others have used a combination of these two approaches (Torkashvand and Aminshokravii 2015).

Behavior is the outcome of various factors. Health education requires an understanding of the health behaviors and associated factors aimed at changing current behaviors, which highlights the role of theories in the research on health behaviors (Bashirian et al. 2012). The theory of planned behavior (TPB), developed by Ajzen and Fishbein in 1985 (Ajzen 1985), has been used in various studies on healthy behaviors education (Tolma et al. 2006), family planning (Sheeran and Taylor 1999), physical activity (Armitage 2005), cancers (Oluka et al. 2017), and sexual behaviors education (Chavoshian et al. 2015). The findings of these studies for healthy behaviors education, sexual behaviors education, and family planning have been promising.

According to TPB, behavior intention is influenced by three independent constructs, namely, attitudes, subjective norms, and perceived behavioral control (PBC). Beliefs regarding the outcomes of engaging in a behavior lead to the formation of attitudes about that behavior. Attitudes toward a behavior are derived from positive and negative perceptions about the behavior. Subjective norms are influenced by one's beliefs about others' expectations, as well as one's motivation to meet these expectations. These norms represent the perception of social pressures for doing or not doing a certain behavior. PBC can influence behavior both directly and indirectly by affecting intention. This construct is influenced by the beliefs about the easiness or difficulty of doing the behavior and is often derived from real control over the behavior. Although no article was found to address divorce using the TPB, it appears that this theory can be used to develop an appropriate

framework for an educational intervention program to change divorce intention.

It is essential to identify effective factors for the creation of certain behaviors so that the most effective constructs involved in exerting effort to do that behavior can be detected. This also assists in designing effective and relevant educational interventions. We were encouraged to conduct the current study due to the importance of marital life strengthening and various consequences of divorce for family members, as well as the need to identify associated factors. To the best of our knowledge, no systematic study has yet addressed the impact of a TPB-based educational intervention on divorce or divorce petition withdrawal. Our hypothesis in this study was that through an intervention training program, we could influence couples' attitudes, control over their own behaviors, and subjective norms that affect their decision making so that they will be able to make more informed decisions.

Methods

Study Design and Participants

To provide context Yazd is one of the central provinces of Iran covering an area of over 74,650 km² of the country. The population of the province is 1,040,286, 87.4% of whom live in urban areas. Males account for 51.3% of the province population. The province includes 10 cities and its capital is the city of Yazd. Most of Yazd province population speak Persian and are Muslim. The life expectancy rate is 75.7 years, the unemployment rate is 11.2%, and the average family size is 3.54 persons. According to the statistics released by the Civil Registration Organization in 2017, the marriage to divorce ratio is 5.2 in Yazd Province. This statistic shows a relatively moderate status compared to large provinces such as Tehran, where the ratio was reported to be 2.8, or other provinces such as Sistan and Balouchestan with a ratio of 12.2 (Statistical center of Iran 2017).

This randomized controlled trial (RCT) with pretest-posttest was conducted in a counseling center under the supervision of the Provincial Judiciary of Yazd, Iran in 2017 with participation of a number of divorce applicants. The divorce applicants are required to attend educational and counseling sessions held by the center. The intervention group attended the TPB-based educational intervention in addition to the routine program. Sample size was calculated at 140 individuals according to similar studies (Jafari 2017; Khaki et al. 2017). The participants, selected from the individuals referred to the center, were randomly divided into two groups, each with 70 individuals using random number table. The inclusion criterion was providing consent for participation in the study. The exclusion criteria were having addiction with frequent unsuccessful attempts to quit, adultery, second

marriage of older male (married or unmarried for any reason) with women much younger than themselves, suffering from psychiatric diseases or any problem detected by the center's professionals that prevented compatibility or made the divorce seem inevitable. The questionnaire of the TPB constructs was filled out by the researcher for all participants before and after intervention using an interview format. The procedure of this study was reviewed and approved by the social deputy of Judiciary of Yazd province and the postgraduate studies center, faculty of health of the university.

Instruments

The instrument consisted of a demographic characteristics questionnaire and 48 items addressing the four constructs of the TPB, which had already been developed in a qualitative study conducted using directed content analysis. The procedure of the qualitative study and the steps of questionnaire development and validation have previously been published (Ardian et al. 2018; Morowatisharifabad et al. 2018).

The attitude construct was investigated with 14 items (e.g., *Divorce is a type of freedom from the past difficult life*) rated on a 5-point Likert scale from *absolutely agree*, *agree*, *neither agree nor disagree*, *disagree*, to *absolutely disagree* scored from 1 to 5, respectively. The minimum and maximum possible scores on this subscale are 14 and 70, respectively, with a higher score indicating more negative attitude toward divorce petition withdrawal.

The PBC construct was examined with 21 items (e.g., *Because of my spouse's violent behavior I'm not able to continue living with him*) rated on a 5-point Likert scale [from *absolutely disagree* (scored 1) to *absolutely agree* (scored 5)]. The minimum and maximum possible scores on this subscale are 21 and 105, respectively, with a higher score indicating a comparatively lower level of PBC over divorce petition withdrawal. The subjective norms were investigated with seven items (e.g., *my parents support my decision to divorce*) rated on a 5-point Likert scale [from *absolutely disagree* (scored 1) to *absolutely agree* (scored 5)]. The minimum and maximum possible scores on this subscale are 7 and 35, respectively, with a higher score indicating that norms do not adequately encourage withdrawing the divorce petition. The behavioral intention construct was examined with six items (e.g., *I intend to compromise, although I have come for uncontested divorce*) rated on a 5-point Likert scale [from *absolutely disagree* (scored 1) to *absolutely agree* (scored 5)], with a higher score indicating being more resolute to divorce.

Intervention

The educational intervention was scheduled in four 2-h sessions across two consecutive days, each with a 15-min break midway through. The sessions were held in the meeting hall of

the counseling center of the Judiciary of Yazd. A consultant who was sufficiently experienced with the couples having history of divorce intention was selected as the lecturer and the director of the training sessions. The corresponding author of the article was actively present in all sessions and, if necessary, assisted the consultant. In the center, a package of tutorials on the problems of marital life and solutions to common life problems were routinely offered to all referring people in group by the judiciary's counselors based on the designed scheme of the judiciary, and a few (2–4) private counseling sessions were then held depending on the type of problem(s) of divorce applicants. For example, when the main problem was addiction of one of the couples, he/she met with a counselor on the treatment of addiction, or if one of them suffered from personality disorders, he/she would be referred to an experienced counselor. Due to the psychological conditions of couples that prevented them from attending long-term training, sessions were held for the intervention group, and the control group only received programs that were routinely held by the counseling center. The contents of the training were developed based on the constructs of the TPB after discussing with one counselor, a holder of Ph.D. in sociology, a health education professor and the corresponding author in a few sessions.

Because communication problems in marital relationships are one of the most important factors for couples' aggression in marital life, and communication problems are usually related to lack of appropriate communication skills (Afrooz et al. 2014; Miri et al. 2016), some practical skills were briefly incorporated into the educational intervention. The behavioral objectives were set for each educational session, and various short techniques were implemented to fulfill them, including lecture, short video tutorials, question and answer, group discussions, and individual counseling (for example, during the rest between the training sessions). In addition, booklets containing the contents presented in the training sessions were also delivered to the participants at the completion of the sessions (Table 1).

Data Analysis

The data were analyzed by SPSS version 23 (SSPS, Inc., Chicago, IL) using descriptive statistics, chi-square test, and covariance analysis (ANCOVA) (Levin 2006).

Results

The average age of the participants was 29.97 ± 7.48 years. 45 (32.1%) participants referred for uncontested divorce (both couples agreeing to divorce), and the rest of the divorce petitions were unilateral. The demographic characteristics of the participants are shown in Table 2.

Table 1 The training program based on theory of planned behavior constructs

General purposes	Title of the session	Activities	TPB constructs	Time
Familiarizing the individuals with each other by raising different marital problems. Empowering people based on a better understanding of their own conditions, doing some drills at home to clarify the current position of individuals for themselves and presenting them at the next meeting	Different difficulties in marital life and couples' knowledge about their current condition	Group discussions and practical work (Listing problems and current conditions of couples by themselves at home)		1 h
Expressing individual feelings, including fears and concerns, about one's own divorce, and explaining divorce as a personal and social damage by counselor. Determining the advantages and disadvantages of divorce, constructive criticism, and empathy skill	the attitude to the reality of divorce or compromise	Group discussions and Lecturing Practical work at home (tabulation of advantages and disadvantages of divorce and compromise)	Attitude	1 h
The amount of control a person has over his/her behavior. To what extent can a person decide on the divorce, or thinks that the situation is out of his/her control? (Training and reminders of this point that different life skills should be learned to learners). Strengthening skills such as active listening, constructive criticism, empathy skills	The ability to have greater control over life problems	Lecturing, and Questions and Answers Role play (active listening, practice or empathy skills)	Perceived behavioral control	2 h
Determining the characteristics of the parent-child relationships as the basis of the family's source of distress in the future. The characteristics of a family that does not recognize the privacy of their children even after their marriage and the role of these interventions in the failure of their children's marital life. Awareness of the useful and harmful aspects of some programs of domestic media, satellite programs, as well as mobile phones and social networks.	The positive and negative roles of others in marital life	Watching educational videos (a display of the content of the behavior of dependent children) Lecturing and Questions and Answers	Subjective norm	2 h
The different stages of the decision-making process, such as determining a person's situation, assessing the current situation, searching for different options to take the correct decision, and ultimately choosing the path and taking the final decision.	Taking the correct decision	Lecturing and Questions and Answers Summarizing the content taught in few sessions.	Intention	2 h

Table 3 shows the TPB construct scores in both groups. According to the results, no significant difference was observed at pretest in the TPB construct scores between the two groups, while the posttest divorce intention was lower in the intervention group than in the control group.

The difference in the intention, subjective norms and attitude scores between pretest and posttest was statistically significant in the intervention group, but not in the control group. The difference in pre-test and posttest PBC scores was not statistically significant among both the intervention and the control group.

The results of the Levene's test showed that the variance was equal in the two groups ($p > 0.05$) and therefore parametric tests were used (Table 4).

The covariance analysis results indicated that posttest scores of the two groups on subjective norms, attitudes, and

PBC were not significantly different after controlling for the effect of pretest scores ($p \geq 0.05$) (Table 5).

The results indicated that 19.3% of the covariance in post-test scores related to divorce intention was explained by the educational intervention ($p < 0.001$).

Discussion

The aim of this study was to investigate the impact of a TPB-based educational intervention on the intention of divorce petition withdrawal among couples applying for divorce in a counseling center in Yazd, central Iran. The results showed that the mean divorce intention score after educational intervention decreased among the intervention group compared to the mean pretest score, which is consistent with the findings of

Table 2 Demographic characteristic of participants in intervention and control groups

Categories	Item	Intervention Group		Control Group		P value*
		N	%	N	%	
Gender	Female	45	64.3	44	62.9	0.861
	Male	25	35.7	26	37.1	
Age	< 25	19	27.1	25	35.7	0.540
	36–30	18	25.7	15	21.4	
	> 31	33	47.1	30	42.9	
Education level	Less than high school	17	24.3	25	35.7	0.336
	high school	29	41.4	25	35.7	
	Higher education	24	34.3	20	28.6	
Number of children	0	22	31.4	36	51.4	0.051
	1	25	35.7	16	22.9	
	> 2	23	32.9	18	25.7	
Duration of marriage (years)	< 5	30	42.9	38	54.3	0.176
	> 6	40	57.1	32	45.7	

Chi-square Test*

similar studies (Sepahvand et al. 2007). In recent years, educational and empowerment programs for couples have been widely implemented, These programs are aimed to help couples acquire further knowledge about one’s own and one’s spouse’s thoughts and feelings, enhance their communication and problem-solving skills, and reduce their stress (Hahlweg and Richter 2010; Halford and Snyder 2012). The findings of this study also conform to the objectives of these programs.

Based on the results of the present study, it can be argued that regarding the three constructs under study, the educational intervention program could not satisfactorily increase the level of control over marital life issues, change attitudes towards marital life and divorce, or prevent the adverse

environmental and individual effects on life problems among our participants. Our results, however, showed that the procedure and contents of education, familiarity with different attitudes, subjective norms and their effects on marital life and further reflection on the consequences of divorce for themselves or their children could at least help them to make more informed decisions. The average posttest intention scores of the two groups in the current study were significantly different.

The findings of this study showed that the mean posttest score on attitude toward divorce withdrawal did not significantly increase among the intervention group. Attitudes are formed by the outcomes of individual experiences or by

Table 3 Comparison of intention, subjective norm, attitude and perceived behavioral control scales between two groups

Variables	Group	Pretest (Mean ± SD)	Posttest (Mean ± SD)	P*
Intention	intervention	18.17 (4.71)	15.02 (4.14)	<0.001
	Control	18.87 (4.96)	18.08 (1.48)	0.217
	P	0.394	<0.001	
Subjective Norms	intervention	20.14 (2.12)	19.49 (2.80)	0.048
	Control	19.39 (3.01)	19.49 (3.38)	.0741
	P	0.088	0.999	
Attitude	intervention	42.72 (5.26)	40.59 (9.19)	0.013
	Control	44.11 (7.75)	42.47 (6.64)	0.057
	P	0.140	0.167	
Perceived Behavioral Control	intervention	58.75 (7.51)	59.00 (8.32)	0.791
	Control	59.50 (8.90)	58.21 (9.11)	0.160
	P**	0.594	0.595	

*Paired t-test

**Independent t-test

Table 4 Levene's test of equality of error variances

Variable	Levene Statistic	df1	df2	Sig.
Intention	0.102	1	138	0.750
Subjective Norm	0.199	1	138	0.656
Attitude	0.057	1	138	0.812
Perceived Behavioral	1.444	1	138	0.232

observations regarding others. As a result, positive beliefs about the outcomes of a certain behavior may be reinforced and therefore that behavior may be strengthened after being directly experienced. In addition, attitude entails the feelings caused by the behavior that can lead to the promotion and strengthening of the attitude (Mack and Shaddox 2004). In the study of Yalcin (Yalcin and Karahan 2007), the education led to an increase in marital satisfaction and improvement of attitude toward higher compatibility. Since marital satisfaction in these studies was measured by certain perceptions, emotions, attitudes, and marital compatibility, it can be argued that education in some studies has led to improvement of marital satisfaction (Azizi et al. 2016). In the present study, educational intervention did not influence the attitudes of participants, probably because the attitudes toward a behavior is based on the beliefs about that behavior and, in our study, more time was needed to change the attitude toward divorce withdrawal. Besides that, when couples attend counseling sessions during the extremely stressful interval of filing for divorce, attitude change seems improbable. Attitude change might be more likely if couples had access to counseling earlier (i.e., before they were in the process of filing).

In this study, the mean PBC posttest score among the control group did not increase significantly. The PBC is one of the important factors in deciding to exert effort to do that behavior

(Arshad et al. 2017). Increase in PBC following intervention indicates its impact on developing the understanding that if I want, I will be able not to divorce my wife, but it seems that there are very important factors that influence the couples who file for divorce. Couples may think that the situation is too difficult to be controlled. For example, spouse's severe addiction, personality disorders, and economic problems may lead them toward the feeling that they are unable to resolve their marital problems (Azizi et al. 2016; Fathi et al. 2016). However, some interventional studies have shown that individuals may be able to arrive at an agreement on some conflicts (Davoodi et al. 2012). The various impacts of the educational interventions may be related to different characteristics and conditions of the participants in different studies (Yalcin and Karahan 2007); however, most participants in our study reported that they had no choice except for filing for divorce. Such attitudes may adversely affect the outcomes of short-term education.

In this study, mean subjective norms score was used as an indicator of participants' willingness to file for divorce. The mean posttest score on this construct among the intervention group did not show the effectiveness of the educational intervention. Subjective norms can also influence marital compatibility. These norms include the influence of parents and relatives, the public opinions in the community, as well as the impact of communications via virtual networks and media programs disseminated by satellite (Ganji et al. 2015; Yousefi et al. 2010).

The educational intervention could not directly affect the influence of relatives on couples' attitudes toward divorce. In many cases, it seems that the governing conditions and relatives (particularly parents) influence couples' decisions to stay married. Some studies indicate that parental influence reduces the chances of divorce (Fatehizadeh et al. 2006), and younger

Table 5 Covariance analysis of posttest scored of intent, subjective norm, attitude and perceived behavioral control, among control and intervention group with controlling the effect of pretest

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intention	43.149	1	43.149	4.582	0.034	0.032
Group	308.398	1	308.398	32.745	0.000	0.193
Error	1290.279	137	9.418			
Subjective norm	461.053	1	461.053	72.777	0.000	0.347
Group	9.644	1	9.644	1.522	0.219	0.011
Error	867.918	137	6.335			
Attitude	1602.954	1	1602.954	30.143	0.000	0.180
Group	36.514	1	36.514	.687	0.409	0.005
Error	7285.475	137	53.179			
Perceived behavioral control	3773.446	1	3773.446	76.674	0.000	0.359
Group	55.225	1	55.225	1.122	0.291	0.008
Error	6742.340	137	49.214			

females and/or those who lack financial independence may be under greater parental influence. Although we did not directly evaluate parental influence in our study, it might have contributed to couples' tendencies to stay married.

According to our results, although the couples' attitudes or feelings of being able to change the conditions did not show any pronounced variation in our study, their knowledge increased to such a level that they changed their intention to withdraw divorce petition. This can be a promising approach to improving the conditions and decision making in the couples who file for divorce. Theoretically, it can be argued that enrichment increases marital compatibility by promoting relationships. This enrichment can be achieved by training different skills based on a specific, theoretically-driven intervention such as the TPB (Marchand and Hock 2000; Miri et al. 2016). Although too few studies have so far addressed the use of the TPB for divorce or marital problems (Miri et al. 2016) to make a comprehensive comparison, educational interventions developed based on educational models are likely to be more effective.

Limitations

One limitation of our study was the short time of the educational intervention program. All the participants (both intervention and control groups) were required to attend routine counseling programs, and therefore it was difficult to design a longer and more complicated intervention program. In addition, the impact of training could have been mitigated by the mental crisis that divorce applicants were experiencing. Another limitation of the study was that only couples who had been referred to special counseling centers by the provincial Justice Department were enrolled.

Conclusion

The results showed that the TPB-based education could change the intention to file the divorce petition and subsequently the decision to divorce due to the emphasis of the theory on the important psychological factors for changing behavior. However, the attitude, subjective norms, and PBC of the participants were not affected by intervention. Given our results, it is recommended that the Provincial Court offer TPB-based training in a study with the collaboration of university professors and counseling centers to help divorce applicants to make informed decisions. Ultimately, educational interventions may help divorce applicants to make better decisions about whether to divorce. Further studies are also recommended to replicate the current study using different models.

Author Contributions SAA and NA contributed to performing all data analyses. MAM contributed data analysis tools and technical support. MHS, MGK and SSM contributed to creating the design of the study and data analyses and writing the manuscript; they should be regarded as the corresponding authors. All authors read and approved the final manuscript.

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Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

All procedures performed in studies involving human participants were in accordance with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. For example, necessary information about the protocol of the study, the confidentiality of their data, and the purpose of the research was offered to the participants and then all the participants signed written consent form to participate in the study before they were enrolled. Besides that, the protocol of the study was approved by the Research Ethics Committee in Shahid Sadoughi University of Medical Sciences, Yazd (ethical code: IR.SSU.SPH.REC.1395.43).

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