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# The structural relationship of communication beliefs and marital commitment: The mediating role of communication patterns

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## Abstract

**Introduction:** This study aimed to investigate the structural relationship between communication beliefs and marital commitment of couples mediated by their communication patterns.

**Materials and Methods:** The statistical population of this study comprised all married students of Islamic Azad University of Mashhad in the academic year 2019-2020 who had more than three years of marital life. Through multi-stage cluster randomized sampling method, three-hundred students were selected and fulfilled Adams and Jones Marital Commitment Questionnaire (1997), Eidelson and Epstein Relationship Beliefs Inventory (1981), and Communication Patterns Questionnaire (1984). Data were analyzed using structural equations, SPSS-25, and AMOS-24 software.

**Results:** The proposed conceptual model has a good fit. The direct effect of communication beliefs on communication patterns is significant and positive ( $P \leq 0.01$ ,  $\gamma = 0.66$ ) and on marital commitment is significant and negative ( $P \leq 0.05$ ,  $\gamma = -0.47$ ). The direct effect of communication patterns on marital commitment is also significant and negative ( $P \leq 0.05$ ,  $\beta = -0.67$ ). Assessing standardized coefficients of indirect effects indicated that the indirect effect of communication beliefs on marital commitment (-0.45) is significant ( $P < 0.01$ ,  $IF = -0.45$ ). The explained variance of marital commitment in terms of communication beliefs and communication patterns was equal to 0.56.

**Conclusion:** According to the findings, communication patterns are used as a mediating variable in the relationship between communication beliefs and marital commitment, and two variables of communication patterns and communication beliefs are able to predict marital commitment.

**Keywords:** Belief, Communication, Marital commitment.

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## Introduction

Marital commitment reflects couples' long-term view of their marriage and shows the nature of each couple's dependence in the marital relationship (1). It is an important element in the stability and cohesion of any marriage (2). Adams and Jones express marital commitment in three personal, moral and structural dimensions (3). In this viewpoint, personal commitment indicates a person's desire to maintain a marital relationship and his/her romantic attitude toward his/her partner and their relationship; moral commitment reflects an individual's moral beliefs to stay in a relationship and behave appropriately, and structural commitment arises from one's external beliefs to stay in a relationship so that external factors such as cultural and customary factors force him/her to stay in the relationship (4,5). In the triangular theory of love, Sternberg introduces commitment as an important and constructive component and a side of the love triangle. Commitment is the cognitive component of this relationship and the numerous cognitive constructs that couples bring into the marital relationship bind them to maintain a long-term relationship with each other (6). Marital commitment is important for the health of the family system, and it is necessary to identify the factors affecting it. As research evidence shows, marital intimacy and personal and religious factors influence it (7).

Couples' marital commitment has a constructive role in creating stability in the family, and various factors such as couples' personality traits can affect the level of marital commitment (8). Fincham and colleagues also introduce cognitive and individual components among the underlying factors of disruption or lack of disruption in marital relationships and believe that dysfunctional cognitions cause tension, followed by breach of promise and the collapse of marital life. Two important cognitive constructs are communication beliefs and communication patterns. The effect of both variables is among the essential resources affecting marital commitment (9).

Eidelson and Epstein (10) argue that dysfunctional communication beliefs include the belief in unchangeability of the spouse, the belief in the destructiveness of disagreement and sexual perfectionism, mind-reading expectation, the belief in gender differences, and negative beliefs and cognitions, which enter the marital relationship with the

individual as necessary and obligatory preferences and become definite goals that, if not achieved, lead to confusion and dissatisfaction with the relationship and can affect the durability of the marital relationship (11). Ellis also believes that many misunderstandings in married life are rooted in the irrational beliefs of couples. These beliefs exist consciously in couples, but they are not aware of their negative impact on increasing their marital problems (12). The studies conducted by Burpee and Langer (13) revealed that communication beliefs significantly negatively affect marital commitment.

The studies by Slavinskien and Zardeckaite and Gottman suggested that communication beliefs can predict marital satisfaction, marital commitment (14,15), divorce and marital infidelity. Dissatisfaction with the relationship and breach of promise have significant relationships with communication beliefs (16). Communication beliefs have a significant negative relationship with other variables such as marital satisfaction by Sharp and Ganong and marital adjustment by Hamamci (17,18). Dysfunctional communication beliefs affect variables such as marital relationships and compatibility and are the cause of many marital disputes (19).

Couples' communication patterns are another cognitive variable that affects marital commitment (20). Christensen and Salavy consider communication patterns as communication channels through which people interact with each other and couples also establish a set of communication patterns that include mutual productive communication pattern, demand-withdraw communication pattern and mutual avoidance communication pattern (21). These patterns determine how couples communicate with each other and what happens in the context of their marital relationship. Destructive patterns seem to have a destructive effect on the marital relationship and the problematic behaviors of couples are due to the implementation of the non-constructive form of these patterns (22). On the other hand, marital satisfaction is a strong predictor of marital commitment which improves with the improvement of communication patterns (23). Communication variables have a significant and positive mediating effect on most of couples' relationships and directly or through other variables, such as sexual satisfaction and

marital satisfaction, are a strong predictor of marital commitment (24). Further, Dattilio's research suggests that cognitive components and dysfunctional communication patterns are inversely related to success in committed relationships (25). Mark and colleagues, along with Eidelson and Epstein, believe that communication beliefs play an essential role in couples' communication functions and communication patterns (26). Willoughby (27) believes that communication beliefs affect couples' relationships and communication processes through multiple mechanisms and prepare for adjustment and maladjustment. These results indicate the influential role of communication beliefs in couples' communication patterns, and their relationship includes success or failure of married life (28).

In recent years, one of the most important reasons for the disputes and separation of spouses has been expressed to be unfaithfulness and lack of commitment. On the other hand, modeling effective variables related to commitment can help prevent marital disputes and enrich the relationship between couples, significantly enhanced marital commitment. Since commitment in our religion and culture is also an excellent value and there is much sensitivity to it, and on the other hand, the variables affecting marital commitment in Iran require much attention. At the same time, there is a lack of research on the relationship between marital commitment and communication beliefs in the form of structural equation models with the mediation of communication patterns, conducting this research became necessary.

### Materials and Methods

The present study was a correlational and structural equation modeling research. The statistical population consisted of all married students of Islamic Azad University of Mashhad in 2019-2020 who had more than three years of married life. To determine the research sample size concerning the statistical research method (structural equation modeling), the principles of determining the sample size were used in multivariate regression analysis because the structural equation modeling methodology is very similar to some aspects of the multivariate regression. In multivariate regression analysis, the sample number (observations) ratio to independent variables should not be less than five. In general, in the structural equation modeling

methodology, the sample size can be determined between five and fifteen observations per measured variable (29). Therefore, in this study, according to the number of input variables in the model and for fifteen observations for each, and to increase the validity of the research findings, the sample size was determined to be three-hundred cases. For sampling, cluster and multistage random sampling methods were used so that two faculties were initially selected randomly from among Mashhad faculties. Then, fourteen fields of study from each faculty and eight classes from each field of study were randomly selected (29). The inclusion criteria comprised lack of major psychiatric disorder, being a student, being married, and having at least three years of marital life. After the approval of the research unit of Bojnourd Islamic Azad University to conduct the research and to observe ethical considerations, before distributing the questionnaires, explanations about the research objectives, questionnaires, voluntary participation in the research, confidentiality of information, and permission to leave the study were provided to the participants, and the written consent was obtained from the participants. Then, they responded to a comprehensive questionnaire consisting of research scales.

### Research instrument

*A) Marital Commitment Questionnaire (MCQ):* This questionnaire was developed by Adams and Jones in 1997 for research purposes and measured the degree of an individual's commitment to their spouse and marriage in three dimensions of personal commitment, moral commitment, and structural commitment. This questionnaire contains 44 questions. The answers to the questions are scored on a 5-point Likert scale from 1 to 5 (strongly disagree, disagree, no opinion, agree, and strongly agree). Questions 11, 12, 16, 24, 28, 29, 30, 31, 33, 35, 36, 37 and 39 are reverse scored. High scores indicate a high level of marital commitment. Adams and Jones evaluated the validity of the marital commitment questionnaire as desirable based on the validity of the correlation of subscales with each other and with the total score. They obtained the reliability coefficients of 91%, 89%, and 86%, respectively, based on Cronbach's alpha for the subscales of commitment to spouse, commitment to marriage, and mandatory commitment (4). In

Iran, Shahsiah et al. translated this questionnaire into Persian and validated it. Its content validity was confirmed by the consulting professors of the University of Isfahan. Moreover, the test reliability based on Cronbach's alpha method and test-retest for the whole test was 85%, and the retest rate was 86% (30). Mohammadi et al. reported Cronbach's alpha coefficients of the components of this test to be 79%, 82%, and 84%, respectively, for personal commitment, moral commitment, and structural commitment (31).

*B) Relationship Beliefs Inventory (RBI):* This questionnaire was developed by Eidelson and Epstein in 1981 to measure irrational beliefs in marital life. The questionnaire consists of 40 questions and five subscales, including the belief in the destructiveness of disagreement, the belief in unchangeability of the spouse, mind-reading, sexual perfectionism, and the belief in gender differences. The responses are rated on a Likert scale (absolutely false, false, more false than true, more true than false, true, absolutely true) and are scored from 1 to 6. Questions number 36, 34,33,29,28,25,24,20, 18,16,13,9,7, and 5 are reverse scored, and in the standard form, the questions related to each subscale are also specified. In this questionnaire, the highest score obtained by a person is 240, and the lowest score is 40. The higher the score obtained and the closer it is to 240, the greater the number of irrational beliefs. Eidelson and Epstein (1981) estimated the reliability of this questionnaire to be 0.72 to 0.81 for the subscales using Cronbach's alpha coefficient (10). O'leary reported the internal consistency of the relationship beliefs inventory 0.72-0.81 (32). James et al. reported an alpha coefficient of 0.58 to 0.83 for the five subscales of this questionnaire (33). In Iran, internal consistency for the subscales of this questionnaire has been obtained by Heydari and colleagues to be 0.47 to 0.70 (34).

Narimani and colleagues reported the internal consistency of the subscales of this research to be between 0.72 and 0.81 (35).

*C) Communication Patterns Questionnaire (CPQ):* This questionnaire was designed by Christensen and Salavy in 1984 at the University of California to examine couples' mutual communication patterns. It contains 35 items and mutual productive communication pattern, demand-withdraw communication pattern and mutual avoidance communication pattern, which evaluate the relationship between couples in three stages of conflict: A) when a problem occurs; B) when discussing the problem and C) after discussing the problem. The responses are rated on a 9-point Likert scale (not possible at all= 1 to quite possible= 9). Christensen and Salary estimated the validity of the three subscales of this questionnaire. Cronbach's alpha coefficients obtained in the studies of these researchers on five scales have been reported between 0.44 and 0.85 (19).

Besides, Cronbach's alpha coefficients in the study by Heavey et al. on Swiss and German subjects have been obtained between 0.74 and 0.78 (36). In Iran, in Ebadatpour reported Cronbach's alpha coefficients of 0.70, 0.71, and 0.66, respectively, for the mutual productive communication pattern (5 questions), mutual avoidance communication pattern, and demand-withdraw communication pattern (37). Additionally, in the research by Seyyedi et al., the internal consistency of the three factors of the questionnaire has been reported between 0.82 and 0.86 through Cronbach's alpha method (38).

## Results

After removing incomplete questionnaires, the data on 300 cases were analyzed. The demographic characteristics of the participants can be seen in Table 1.

**Table 1.** Demographic characteristics of the participants

Index	Group	Frequency	Percentage
Gender	Female	173	57.7
	Male	127	42.3
Education level	Undergraduate	100	33.3
	Postgraduate	200	66.7
Employment	Employed	200	66.7
	Unemployed	100	33.3
Number of children	No child	82	27.3
	One child	142	47.3
	Two children	74	24.7
	Three children	2	0.7

The data were screened before the statistical analysis, and univariate outliers were identified with a box plot. The results showed that there was no univariate outlier. Multivariate outliers were also identified using Mahalanobis statistics.

Then, the desired distances were modified based on the degrees of freedom (the number of

variables, which were the eight predictor variables in the model) in Chi-square test and were examined at the level of  $\alpha = 0.001$  (39). The modified index was more remarkable than  $\alpha = 0.005$  for all participants, and there was no multivariate outlier. Descriptive indices and correlation coefficients of the research variables have been provided in Table 2.

**Table 2.** Descriptive indices and correlation coefficients of communication beliefs, communication patterns and marital commitment

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13
1.Destructiveness of disagreement	-												
2.Unchangeability of the spouse	0.36**	-											
3. Mind reading	0.42**	0.52**	-										
4.Sexual perfectionism	0.49**	0.52**	0.52**	-									
5.Gender differences	0.50**	0.41**	0.39**	0.46**	-								
6.Communication beliefs	0.73**	0.74**	0.75**	0.79**	0.74**	-							
7.Mutual productive communication	0.32**	0.25**	0.30**	0.31**	0.34**	0.40**	-						
8.Demand-withdraw communication	0.15**	0.14**	0.28**	0.15**	0.20**	0.25**	0.30**	-					
9.Mutual avoidance communication	0.29**	0.25**	0.29**	0.32**	0.22**	0.36**	0.35**	0.23**	-				
10.Personal commitment	0.43**	0.38**	0.42**	0.38**	0.34**	0.52**	0.38**	0.39**	0.35**	-			
11.Moral commitment	0.38**	0.40**	0.39**	0.40**	0.43**	0.53**	0.45**	0.32**	0.28**	0.36**	-		
12.Structural commitment	0.45**	0.40**	0.41**	0.41**	0.45**	0.56**	0.35**	0.34**	0.24**	0.55**	0.45**	-	
13.Marital commitment	0.53**	0.49**	0.51**	0.49**	0.50**	0.67**	0.49**	0.44**	0.34**	0.83**	0.74**	0.81*	-
Mean	28.02	26.99	25.55	29.07	27.19	136.83	-1.76	48.54	16.05	42.74	37.08	37.30	117.12
SD	11.98	11.91	11.93	12.17	12.99	45.94	18.51	15.88	5.47	18.44	15.16	13.93	37.88
Skewness	0.07	0.08	0.16	-0.08	0.03	-0.13	0.11	-0.15	-0.06	0.65	0.48	0.64	0.36
Kurtosis	-1.52	-1.55	-1.46	-1.56	-1.70	-1.58	-1.89	-1.55	-0.96	-1.28	-1.39	-1.18	-1.26

The results displayed in Table 2 demonstrate that there are significant negative relationships between communication beliefs with the dimensions and total score of marital commitment ( $P < 0.01$ ). These beliefs have a negative relationship with mutual productive communication patterns and a significant positive relationship with demand-withdraw and mutual avoidance communication patterns ( $P < 0.05$ ). Other results indicate a positive relationship between mutual productive communication pattern and the dimensions and

total score of marital commitment. Also, there is a significant negative relationship between demand-withdraw and mutual avoidance communication patterns and the dimensions and total score of marital commitment ( $P < 0.01$ ). Structural equation modeling requires some basic assumptions. Some of these assumptions are univariate and multivariate normality of distribution of variables, non-multicollinearity and the independence of errors. Study of the normality of the distribution of variables, while considering a skewness of

$\pm 2$  (40) and a kurtosis of  $\pm 7$  (41), suggested that skewness and kurtosis in all variables were at a desirable level and univariate normality has been achieved (Table 2). In the study of multivariate normality, after calculating the values of standardized residuals, the distribution of residuals was examined by one-sided Kolmogorov-Smirnov test. The significance level of the test being greater than the alpha of  $P \geq 0.001$  indicates the normality of the distribution of variables (39). The results revealed that the distribution of residuals is normal ( $P \geq 0.05$ ,  $df = 300$ ,  $Z = 0.04$ ). In examining non-collinearity of the model predictor variables, if the tolerance index is lower than 1 and higher than 0.40 and the Variance Inflation Factor (VIF) is less than 10 (42), the assumption of non-multicollinearity is fulfilled. The results demonstrated that tolerance coefficients ranged from 0.62 to 0.79 and variance inflation from 1.16 to 1.60. Accordingly, it can be said that the assumption has been fulfilled. Durbin-Watson statistic was used to examine the assumption of independence of errors. Coefficients between 1.5 and 2.5 and close to 2 for this statistic indicate the independence of errors (43). This coefficient was equal to 1.76 in the path model of the present study. After realizing the assumptions, the research conceptual model was investigated. Model estimation was performed by the maximum likelihood method. There are several indices to examine the model fit. The non-significance of Chi-square statistic is one of the model fit indices. But this index is affected by the sample size. Accordingly, other fit indices should be applied. Values between 1 and 3 for the ratio of Chi-square to degrees of freedom ( $\chi^2/df$ ), values of 0.05 and lower for the Root Mean Square Error of Approximation

(RMSEA) and values of 0.95 and higher for Goodness of Fit Index (GFI), Comparative Fit Index (CFI) and Normed Fit Index (NFI) indicate the desired fit of the model (44). The fit indices of the initial model indicated that the research model does not have a very good fit ( $\chi^2 = 88.67$ ,  $df = 41$ ,  $P = 0.0001$ ,  $\chi^2/df = 2.16$ ,  $GFI = 0.94$ ,  $CFI = 0.95$ ,  $NFI = 92.0$ ,  $RMSEA = 0.06$ ). Examination of the proposed modification indices of the software suggested that by establishing covariance between the errors of some model markers, the fit indices are improved. Accordingly and based on the proposal in (39), these relationships were established. The results showed improvement of the model fit indices ( $\chi^2 = 66.56$ ,  $df = 39$ ,  $P = 0.04$ ,  $\chi^2/df = 1.71$ ,  $GFI = 0.96$ ,  $CFI = 0.97$ ,  $NFI = 0.95$ ,  $RMSEA = 0.049$ ). The path diagram of the modified model is displayed in Figure 1.

The study of path coefficients demonstrated that the direct effect of communication beliefs on communication patterns is significant and positive ( $P \leq 0.01$ ,  $\gamma = 0.66$ ) and their direct effect on marital commitment is significant and negative ( $P \leq 0.05$ ,  $\gamma = -0.47$ ). Further, the direct effect of communication patterns on marital commitment is significant and negative ( $P \leq 0.05$ ,  $\beta = -0.67$ ). Examination of standardized coefficients of indirect effects suggested that the indirect effect of communication beliefs on marital commitment (-0.45) is significant ( $P < 0.01$ ,  $IF = -0.45$ ). The explained variance of marital commitment in terms of communication beliefs and communication patterns was equal to 0.56, meaning that 56% of the changes in marital commitment can be explained in terms of communication beliefs and communication patterns. According to Cohen (45), coefficients of 0.50 can be considered as large effect sizes.

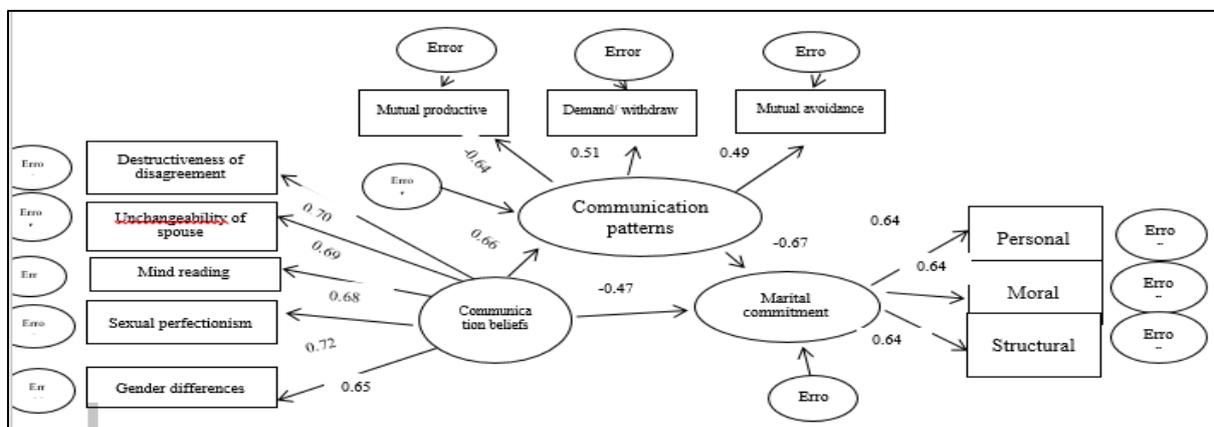


Figure 1. A modified model of predicting marital commitment in terms of communication beliefs and communication patterns

## Discussion

The present study investigated the structural relationship between communication beliefs and marital commitment of couples mediated by their communication patterns. Investigations have shown that the proposed conceptual model has a good fit and the obtained results indicate the direct effect of communication beliefs on communication patterns and the direct effect of communication beliefs and communication patterns on marital commitment. Moreover, communication patterns (as the mediating variable) mediate the relationship between communication beliefs and marital commitment, and thus, the research hypotheses were confirmed. Data analysis in this study suggests the direct effect of communication beliefs on communication patterns. Communication beliefs have a significant negative relationship with mutual productive communication patterns and a significant positive relationship with mutual avoidance and demand-withdraw communication patterns. Couples' communication beliefs affect their communication patterns and methods in relation to their spouse. These findings are consistent with the previous studies, including the research by Nemechek and Olson (46), Willoughby et al. (47), and Sava (48). For example, Nemechek and Olson, in a study on middle-aged couples, investigated the relationship between communication beliefs and the quality of communication patterns using Eidelson and Epstein Relationship Beliefs Inventory and Christensen and Salavy Communication Patterns Questionnaire. The results revealed that couples' communication beliefs have a significant role in various marital relationships, including the quality and patterns. Willoughby and colleagues examined the conceptual framework of marriage and the role, values and beliefs of individuals in marital attitudes and relationships. Their results suggested the effect of beliefs on relationships and communication processes of couples and their attitudes toward marital relationships. Sava conducted a study on a sample of three-hundred divorce-seeking couples using the present research tools and suggested that irrational beliefs and personality factors affect couples' communication patterns so that irrational beliefs can lead to maladaptive communication patterns and defective communication schemas in individuals. Further, in line with the results of this study, in

Iran, Tikdari Nezhad et al. in a study on four-hundred employed couples examined the relationship between communication beliefs with marital conflicts, and the choice of the communication pattern. The results indicated a significant relationship between communication beliefs with marital conflicts and the choice of the communication pattern. Dysfunctional communication beliefs lead to the formation of non-constructive and problematic communication patterns, followed by marital conflicts (49).

In explaining these results, one can refer to the views of Christensen and Salavy. They believe that couples interact with each other through communication channels, which are their communication patterns. These patterns are gradually formed in people's interactive methods from childhood, and problematic behaviors are simply the implementation of non-constructive forms of these patterns. On the other hand, Eidelson and Epstein suggest that people, during their life, set beliefs and expectations in interaction and communication with others, especially with the spouse, and since they have accepted them as reality, they interact with their spouse based on this communication beliefs. Whether the interaction pattern they use is constructive or non-constructive stems from their beliefs about communication (21). In line with these results, Mark et al. believes that communication beliefs play an important role in couples' communication functions and may affect their communication patterns. When two unfamiliar people come beside each other, the durability and quality of their relationship depend on the knowledge and skills that originate from their individual beliefs in the field of communication. Their research has shown that couples who bring more irrational communication beliefs into the marital relationship are not sufficiently successful in establishing a constructive relationship, and demand-withdraw and mutual avoidance communication patterns are further seen in their relationships. Conversely, couples who have less irrational communication beliefs have more constructive communication patterns in their relationships (26).

Moreover, in a separate analysis of the direct effects of communication beliefs on marital commitment and the direct effect of communication patterns on marital commitment, the results indicated a significant

negative relationship between communication beliefs and marital commitment and also a significant negative relationship between communication patterns and marital commitment and its dimensions. On the other hand, both variables could predict 56% of the changes in marital commitment. Concerning the significant effect of communication beliefs on marital commitment, these results are consistent with the previous studies such as studies by Stackert and Bursik (50), Nickl (51), Hamamci (18), Slavinskien and Zardeckaite (14) and Gottman (15). However, the present study was conducted among married people living together while these studies were carried out in couples for whom marital infidelity or divorce has occurred. Stackert and Bursik, in their research among such couples, examined the effect of communication beliefs and dissatisfaction with the marital relationship on the breach of promise.

They demonstrated that dissatisfaction with the relationship and breach of promise due to dysfunctional communication beliefs have occurred in at least one of them and reported that some components of communication beliefs are more common in women and some are more common among men (50). Slavinski and Zardeckaite (14) and also Gottman (15), in similar studies on such couples, have shown that communication beliefs have been one of the predictors of marital dissatisfaction and lack of marital commitment, divorce, and marital infidelity. In a study of 279 divorced couples using the scale provided by Eidelson and Epstein, Nickl found a relationship between irrational communication beliefs and marital adjustment, leading couples to breach of promise and separation. The results of the present research performed on a sample of couples, including males and females, using Adams and Jones Marital Commitment Questionnaire and Eidelson and Epstein Relationship Beliefs Inventory, are consistent with the results of the study by Seiri Sabet conducted only on one-hundred fifty married women with the help of another scale of irrational communication beliefs called Jones' Scale and Adams and Jones Marital Commitment Questionnaire. The results also revealed that there is a significant relationship between irrational beliefs and marital commitment. With the existence of these beliefs in women, marital commitment decreases. On the other hand, other studies have

investigated the impact of communication beliefs, using Eidelson and Epstein Relationship Beliefs Inventory, on other components of marital relationships, which in line with the current study results, the effect of communication beliefs on communication beliefs those variables was significant (52).

For example, Seydi's study on three-hundred fifty and eight couples, examined the role of communication and spiritual beliefs in marital satisfaction mediated by the relationship quality and age indicated that the subscales of communication beliefs were indirectly able to predict marital satisfaction through the mediation of the relationship quality and age so that irrational communication beliefs have a very destructive effect on it. Further, communication beliefs could negatively affect marital satisfaction through the relationship quality and the couple's age (53).

Additionally, the results of the research data analysis about the significant effect of communication patterns on marital commitment are consistent with the results obtained by Yubo and Jiang (54). They examined four-hundred Chinese couples and found that communication patterns mediate the relationship between marital commitment and marital satisfaction. Using the actor-partner interdependence model, they concluded that spouses' commitment to each other correlated with communication patterns and marital satisfaction. Specifically, in comparing these couples, spouses with more significant marital commitment and satisfaction had more consistent communication patterns. The results of this study are congruent with the findings obtained in Yoo's research. In this study on the role of gender attitude and communication patterns in marital satisfaction among Korean adult couples, Yoo indicated that communication patterns, in addition to having a direct effect on marital satisfaction, mediate the relationship between sexual attitude and marital satisfaction (55).

Moreover, the present results regarding the effect of communication patterns are consistent with the results of a study conducted by Lotfi and Rasouli (56). They investigated the relationship between the patterns of marital quality and psychological needs satisfaction with marital communication patterns with the mediating role of marital intimacy among four-hundred couples through convenience sampling using Christensen and Salary Communication

Patterns Questionnaire. Based on the findings, there is a significant relationship between the quality of marital life and psychological satisfaction with communication patterns, and these results are comparable to the results of this research since, in both studies, three communication patterns (productive, demand-withdraw, and mutual avoidance) in couples have been used to affect the quality of marital life patterns, including marital commitment. Mutual productive communication pattern has a significant positive effect on the dimensions, and total score of marital quality and marital commitment and demand-withdraw and mutual avoidance communication patterns have a significant adverse effect on the dimensions and total score of marital quality and marital commitment. Couples who use productive communication patterns in their relationships are more committed to maintaining their marital bond and improving quality of life. On the contrary, people with demand-withdraw and mutual avoidance communication patterns have less commitment to maintaining the marital relationship and improving marital quality. In explaining these findings, it can be said that marital commitment is a psychological variable whose final effect is a stronger connection to the marital relationship. Commitment shows the nature of the couple's dependence on the relationship (5), indicates the value that couples place on their marital relationship, and shows their effort and attitude to maintain and continue their marriage (57). The most important and highly considered factor influencing marital commitment is communication because communication disorders can affect the permanence and stability of married life and marital commitment. On the other hand, communication problems can be caused by the inefficient cognitive processes of couples (58). Ellis believes that communication beliefs and patterns are two types of cognitive processes, and their dysfunction and inefficiency cause most behavioral issues and interpersonal conflicts, including breach of promise and other marital problems (59). According to the theory of investment model about the long-term compatibility of relationships in couples, Rusbult et al. (60) showed in their research that the elements of cognition and perception have a more prominent role in these relationships. Besides, in explaining these findings, one can refer to Sternberg's triangular theory of love.

Based on this theory, commitment has a cognitive aspect, and the cognitions of each of the two couples lead to marital commitment. These cognitions include the expectations, beliefs, patterns, and aspirations in the individual's cognitive structure, and the individual brings them into the marital relationship (6). Tang and Curran also state that commitment to the marital relationship is a referential framework of values, beliefs, and patterns that may be self-made or prescribed by others. Non-constructive communication patterns reduce marital commitment and decrease the quality of marital life (5). Further, data analysis suggested that communication patterns are a mediating variable in the relationship between communication beliefs and marital commitment. In addition to directly affecting marital commitment, communication beliefs also influence marital commitment through the mediation of communication patterns. In this line, Crapo et al. studied the mediating role of couples' communication patterns at the level of thoughts and beliefs and their relationship with marital satisfaction and commitment on a sample of one-hundred thirty-one married men in the United States. The results indicate a significant and direct effect of both cases on sexual satisfaction and marital commitment, and the mediation of communication patterns in the relationship between thoughts and beliefs with marital commitment was also confirmed (61). The findings of this study are consistent with the results of Seydi et al. research (53) on three-hundred fifty-eight married women in Marivan, which was done using the same scales as this study. They suggested that the role of communication beliefs in marital satisfaction and commitment through the mediation of the relationship quality is significant. The results demonstrated that communication beliefs affect marital commitment through influencing the quality of communication patterns.

Although research background showed that few studies have been conducted on the mediating role of communication patterns in the relationship between communication beliefs and marital commitment, numerous studies have examined other variables as mediators of the relationship between communication beliefs and marital commitment. The results of investigations revealed that the findings of the present research are consistent with such studies as the

research by Bazzazian et al. (62) and Tariveh et al. (63). The results Bazzazian et al. on two-hundred forty-eight married women using path analysis suggested that marital expectations indirectly affect marital commitment through individuals' performance.

A structural study on the relationship between marital commitment based on communication beliefs, emotional engagement, and criticism in the family with the mediating role of marital intimacy was conducted by Tariveh et al. on seven-hundred forty-six couples using Eidelson and Epstein Relationship Beliefs Inventory and Adams and Jones Marital Commitment Questionnaire. The results supported the present findings and showed that marital intimacy mediates the relationship between marital commitment and communication beliefs (63). Based on the evidences, the mediating role of communication patterns in the relationship between communication beliefs and marital commitment confirms the role of cognitive processes of individuals so that communication beliefs resulting from dysfunctional cognitions lead to defective processing in this regard and the use of non-constructive communication patterns (demand-withdraw and mutual avoidance). In explaining the direct and indirect effect of communication beliefs on marital commitment, it can be stated that basically, everyone lives in a world full of beliefs and thoughts about relationships with the spouse, some of which are irrational and inefficient (59). They refer to irrational beliefs and mentalities specific to marital relationships and cause problems by excessive use (10). In an exaggerated and absolute way, these beliefs engage the nature of relationships and communication patterns of couples and also surround the patterns that each chooses in their relationships (64). The individual's irrational beliefs and opinions about his/her relationship with the spouse lead to the tendency to use specific patterns in the relationship with the spouse; withdrawal, demand, and mutual avoidance are among these cases (10). Unfortunately, if a person allows these misleading beliefs and patterns to overshadow his/her life and builds the relationships accordingly, he/she has placed him/herself in a vicious cycle that undermines commitment to the relationship. These beliefs affect the relationship and communication processes of couples and prepare the ground for compatibility and incompatibility.

Communication patterns are created based on invisible contracts through mechanisms; contracts made by the individual's beliefs and mentalities about the relationship, and these patterns affect one's interactions with others so that couples' communication beliefs influence their patterns and methods of communicating with the spouse (24). Couples who bring more irrational communication beliefs into the marital relationship do not successfully establish a constructive relationship, and demand-withdraw and mutual avoidance communication patterns are further seen in their relationships. These communication patterns have little flexibility and reduce the couple's proper understanding of each other and make them unable to support one another, ultimately weakening their commitment and staying in the relationship. In contrast, couples who have less irrational communication beliefs have more productive communication patterns in their relationships (10). The present research has some limitations such as the short duration, the limited number of married students of Islamic Azad University, branch of Mashhad, which makes it difficult to generalize the results to other groups, and the impact of multiple tests that causes impatience and lack of accurate answer to the questions. Further, the use of self-report instruments limits the results that can be reached using the research, although most studies in this field are based on self-reported data. Lack of control over some characteristics of the participants, such as socio-cultural status and the influence of the original families, is another limitation of the present study. Considering the results of this study and the influential role of communication beliefs and communication patterns in marital commitment among the statistical population of this research, it is recommended that the variables of this study be replicated by other researchers in different societies with different cultures to increase generalizability. It is also suggested that the effect of other cognitive constructs on marital commitment be considered independently in future research, and appropriate research projects are planned in this field. According to the present study, since marriage and choice of a spouse are essential decisions in marital life, it is recommended that in premarital counseling, these variables be measured and examined in both couples. Besides, its other application is to solve marital and communication problems, change and

correct beliefs, and train communication skills and constructive communication patterns to couples with marital problems and conflicts. In addition, concerning the role and importance of these variables in family life, it is suggested that proper training of parents should be put on the agenda of educational and welfare centers in order to correct parenting methods that lead to the formation of irrational beliefs and patterns in children.

### Conclusion

Findings of the present study indicate that marital commitment as a significant factor for family stability and loyalty is influenced by cognitive variables and affects the level of

marital commitment among couples. One of these factors includes communication beliefs. Dysfunctional communication beliefs negatively influence the communication patterns. While friendly, constructive and efficient communication patterns increase the level of marital commitment.

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