

Predictors of Marital Burnout in Pregnant Women Based on Social Cognitive Theory Components

Mahin Moravejjifar (MSc)¹, Reza hassannia (MSc)², Habibollah Esmaeili (PhD)³, Hadi Tehrani (PhD)⁴, Mohammad Vahedian Shahroodi (PhD)^{5*}

¹ MSc Student in Health Education and Health Promotion, Student Research Committee, Mashhad University of Medical Sciences, Mashhad, Iran

² MSc Student in Medical-Surgical Nursing, Student Research Committee, Gonabad University of Medical Sciences, Gonabad, Iran

³ Professor, Social Determinants of Health Research Center, Mashhad University of Medical Sciences, Mashhad, Iran

⁴ Assistant Professor, Social Determinants of Health Research Center, Mashhad University of Medical Sciences, Mashhad, Iran

⁵ Associate Professor, Social Determinants of Health Research Center, Mashhad University of Medical Sciences, Mashhad, Iran

ARTICLE INFO	ABSTRACT
<p><i>Article type:</i> Original article</p>	<p>Background & aim: Pregnancy is considered a critical period in marital life and any changes can lead to marital burnout in pregnant women. Therefore, this study was conducted to investigate the predictors of marital burnout in pregnant women in Gonabad, based on social cognitive theory components.</p>
<p><i>Article History:</i> Received: 23-Jan-2021 Accepted: 08-Jun-2021</p>	<p>Methods: This descriptive-analytical study was performed on 261 pregnant women in Gonabad, Razavi Khorasan Province, Iran. The required data were collected using questionnaires, namely a demographic information form, the Couple Burnout Measure, and a If-structured questionnaire based on social cognitive theory. The data were analyzed in SPSS software (version 25) using Spearman's coefficient, Kruskal-Wallis, Mann-Whitney U test, and linear regression.</p>
<p><i>Key words:</i> Pregnant Women Marital Burnout Social Cognitive Theory Predictors</p>	<p>Results: The mean age of pregnant mothers was obtained at 28.69±5.47 and they were at 23.67±9.91 weeks of pregnancy. It was revealed that all components of social cognitive theory, except outcome expectation, were significantly associated with marital burnout. This model was able to predict 15% of marital burnout in pregnant women. It was also found that the components of skills (P=0.006), understanding of the situation (P=0.041), self-efficacy of overcoming obstacles (P=0.128), and self-efficacy (P=0.153) were the strongest predictors of marital burnout in descending order.</p> <p>Conclusion: In this study, the components of skills and understanding of the situation were found to be the most important predictors of marital burnout in pregnant mothers. It is suggested to use this theory, and especially focus more on these variables, in designing educational programs to reduce problems caused by marital burnout in pregnant women.</p>

► Please cite this paper as:

Moravejjifar M, hassannia R, Esmaeili H, Tehrani H, Vahedian Shahroodi M. Predictors of Marital Burnout in Pregnant Women Based on Social Cognitive Theory Components. Journal of Midwifery and Reproductive Health. 2021; 9(3): 2834-2843. DOI: 10.22038/jmrh.2021.55174.1673

Introduction

Women's health conditions in all dimensions are considered the most important foundation of community health (1). The women's roles as mothers and wives greatly affect the health of other family members (2). Pregnancy is one of the most important and sensitive periods of a woman's life (3) that causes various physical, psychological, and social changes in pregnant

women and their husbands (4). These changes can also affect the couples' emotional relationship and marital satisfaction (5). The results of studies indicate a decrease in marital satisfaction during pregnancy (6). The change in the roles of husband and wife due to pregnancy is also considered one of the causes of marital burnout (7). The literature review in this field

* Corresponding author: Mohammad Vahedian Shahroodi, Associate Professor, Social Determinants of Health Research Center, Mashhad University of Medical Sciences, Mashhad, Iran. Tel: 05138544633. Email: vahedianm@mums.ac.ir

has shown that women are significantly more likely to suffer from marital burnout than men (7, 8). Based on the results of a study conducted by Soares, approximately 21% of women had high levels of burnout (9).

Burnout begins with a mismatch between people's expectations and the realities of their lives (10), and then gradually the conflicts, challenges, and stresses of life lead to marital burnout (11). In addition, psychological pressures and small resentments contribute to the development of burnout (12). Pines has identified the components of couples' burnout in three dimensions, namely physical, emotional, and psychological (13). Accordingly, physical burnout occurs with feelings of tiredness, boredom, and lethargy that cannot be relieved by sleep.

The emotional dimension includes lack of desire and satisfaction, development of emotional erosion, and reduction of motivation (11). Individuals with emotional exhaustion suppose that they are emotionally devastated and are constantly annoyed and discouraged (14). Mental exhaustion usually manifests itself in the form of decreased self-esteem, negativity towards the relationship with the spouse, and feelings of despair and frustration towards the spouse (11, 14). Holstean defines burnout as a form of depression since they have some common symptoms (8). Marital satisfaction has also been expressed as a factor influencing women's mental health (15). Regarding this, marital burnout is an important issue that is associated with numerous negative variables, such as depression, tension, despair, and sadness, and negative thoughts are among the factors that can cause burnout in couples. Several factors lead to marital burnout among couples, including social communication problems, loneliness, and decreased life satisfaction (16).

The issue of marital burnout in society can negatively affect the mental health of both couples and children (17). In case that affecting factors on marital burnout are being addressed, it can be expected various psychological, emotional, and social problems of families, and in general of the society, are reduced (10). It has been revealed that the rate of marital burnout has a two-way relationship with environmental

and social factors and the quality of life (11). Nowadays, the patterns and theories of healthcare education identify several factors affecting behavior and determine the relationships among these factors and the conditions under which these relationships occur (18). One of the most effective theories in this field is the social cognitive theory developed by Bandura (19). The social cognitive theory emphasizes that individual and environmental characteristics impact behavior. This theory determines the predictors and effective principles in behavior formation and offers solutions to change behavior (20).

Social cognitive theory is a causal model that according to the principle of reciprocal determinism presents three sets of factors that affect each other (21), namely the individual (e.g., beliefs and expectations), individual's behavior, and environment (22). This theory strongly emphasizes the importance of the environment (23) and provides a theoretical framework for understanding the social-psychological mechanisms influencing an individual's beliefs and behavior change (24). To the best of our knowledge, no research has been conducted to examine the predictors of marital burnout among pregnant women based on social cognitive theory. The related studies have been conducted mainly in the field of recognizing predictors of mental health and life satisfaction based on social cognitive theory in different groups, such as women and students.

In a study conducted by Jamali, students' mental health predictors have been investigated based on social cognitive theory (18), and in a study performed by Shamsirgaran, the correlation between communication skills and marital burnout has been examined (25). In another study, Abusalehi determined the predictors of mental health among the elderly based on social cognitive theory (26). Moreover, Ghasemi has evaluated the relationship of social support and self-efficacy with mental health and life satisfaction (27). Therefore, considering the importance of pregnant women in the healthcare system of each country, the probability of marital burnout in this group, the lack of studies in the field of theoretical frameworks affecting marital burnout, and the need of recognizing these factors to design

effective educational interventions, this study aimed to determine the predictors of marital burnout among pregnant women based on social cognitive theory.

Materials and Methods

This descriptive-analytical cross-sectional study was conducted on 261 pregnant women referring to comprehensive healthcare services centers for prenatal care in Gonabad, Razavi Khorasan Province, Iran, 2017. The sample size was determined at 265 people according to a similar article (28) with a mean of 20.76 ± 20.76 , interval confidence of 95%, and a power test of 2.5 using the formula for comparing the mean with a constant number.

The instruments used in the study included two questionnaires, namely the Standard Couple Burnout Measure (CBM; designed by Pines) and a two-part researcher-made questionnaire. The first part of this questionnaire consisted of the demographic information of pregnant mothers, including age, spouse age, year of marriage, week of pregnancy, history of abortion, planned pregnancy, employment status, education, and physical or mental illness. In the second part, questions related to the components of the social cognitive theory were investigated in 11 sections, namely awareness, outcome expectation, outcome value, self-efficacy, self-efficacy of overcoming obstacles, access, social support, observational learning, skills, understanding of situation perception, and self-regulation. The items in each section were as follows:

- Awareness: 7 items (e.g., "Why is a satisfying relationship with a spouse important in pregnancy?")
- Outcome expectation: 6 items (e.g., "Having an emotional, verbal, and sexual relationship with a spouse makes me spend a good pregnancy.")
- Outcome value: 5 items (e.g., "A proper and emotional relationship with my spouse is very important to me because of the baby's physical and mental health.")
- Self-efficacy: 4 items (e.g., "I can have a good relationship with my spouse even when I feel depressed.")
- Self-efficacy of overcoming obstacles: 5 items (e.g., "I can treat my spouse well even when my spouse does not treat me well.")

- Understanding of the situation: 5 items "I understand my spouse even if he cannot pay attention and treat me well due to work fatigue."
- Access: 4 items (e.g., "My spouse and I have access to the information needed to have a proper and emotional relationship with each other.")
- Social support: 5 items (e.g., "Healthcare staffs encourage me to have a proper relationship with my spouse.")
- Observational learning: 4 items (e.g., "Observing people with an emotional and intimate relationship with their spouse encourages me to do the same.")
- Skills: 6 items (e.g., "I have the ability and skill to build emotional and friendly relationships with my spouse.")
- Self-regulation: 6 items (e.g., "I have a goal and regular plan to have a better relationship with my spouse.")

The researcher-made questionnaire, which was on the basis of the social cognitive theory, was prepared based on the Marital Satisfaction Scale (developed by Enrich with a high correlation with couples' burnout) and similar studies in this field. To check the content validity of the researcher-made questionnaire, the opinions of 11 experienced professors of health education, health promotion, and reproductive health were applied in the preparation, edition, and modification of the questionnaire.

Finally, the content validity indices of awareness, outcome expectation, outcome value, self-efficacy, self-efficacy of overcoming obstacles, understanding of the situation, access, social support, observational learning, skills, and self-regulation were obtained at 0.88, 0.91, 0.94, 0.91, 0.94, 0.89, 0.99, 0.98, 0.94, 0.93, and 0.94 in this study, respectively. Since the obtained index for each of these components was higher than 0.79, it can be concluded that this questionnaire had a high content validity index. Furthermore, according to the opinions of the experts evaluating the items, those with a relative validity ratio of less than 0.62 were removed from the questionnaire.

To determine the internal and external reliability of the instrument, after obtaining the necessary permissions, 29 pregnant mothers were randomly selected by referring to the

comprehensive healthcare services centers. The participants completed the informed consent and responded to the Pines CBM and the researcher-made questionnaires in two stages with a one-month interval. The collected data were analyzed in SPSS software (version 25). The internal reliability of the instrument was obtained using Cronbach's alpha test; afterward, its external reliability was calculated using the intraclass correlation coefficient (ICC) and the correlation of the values obtained in the first and second stages.

Cronbach's alpha and correlation coefficients were obtained respectively for the components of awareness at 0.72 and 0.77, outcome expectation at 0.81 and 0.81, outcome value at 0.72 and 0.70, self-efficacy at 0.92 and 0.88, self-efficacy of overcoming obstacles at 0.71 and 0.97, understanding the situation at 0.73 and 0.75, access at 0.76 and 0.71, social support at 0.87 and 0.94, observational learning at 0.82 and 0.85, skills at 0.71 and 0.88, and self-regulation at 0.70 and 0.89. Additionally, Cronbach's alpha coefficient and ICC of the whole researcher-made questionnaire of marital burnout based on social cognitive theory were estimated at 0.88 and 0.95, respectively, which indicated the good reliability of the questionnaire.

The 21-item CBM is rated on a 7-point Likert scale (from 1 to 7), rendering for the total range score of 21-147, in which higher scores indicate higher burnout levels. To achieve better interpretation, the scores obtained from the questionnaire were divided by 21 (i.e., the total number of items), and then, the resulted scores were converted into degrees. Accordingly, the grades higher than 5, between 4 and 5, between 3 and 4, between 2 and 3, and 2 and less showed the need for immediate help, crisis, burnout, the risk of burnout, and a good relationship, respectively.

It should be noted that the test-retest reliability scores of this questionnaire were obtained at 0.89, 0.76, and 0.66 in the one-month, two-month, and three-month periods, respectively. Moreover, its alpha coefficient was measured at 0.91-0.93. In Iran, Navidi administered this questionnaire on a sample of 240 cases (120 nurses and 120 teachers) and calculated its reliability at 0.86 using Cronbach's

alpha coefficient (29). In our study, the external and internal reliability scores of this questionnaire were estimated at 0.77 and 0.81 using Cronbach's alpha coefficient and ICC, respectively.

The samples were collected from all comprehensive healthcare services centers in Gonabad (7 centers). The list of pregnant mothers of each center was prepared and according to the population of pregnant mothers covered by each center and the inclusion criteria, sampling was performed from each center separately using the random sampling method. To this end, the lists of pregnant mothers were prepared from each center separately and all centers (i.e., the total population of pregnant women in the city). Afterward, sampling was conducted by calculating the proportion of the population covered by each center.

The inclusion criteria were being at the age range of 15-45 years old, having at least primary school education, and being willing to participate in the study. On the other hand, the participants who were dissatisfied to take part in the study and had an acute physical or mental illness were excluded. The subjects were assured of the confidentiality of the information and the possibility of voluntary participation in this study. After obtaining informed consent from the participants, the questionnaires were distributed among them to fill out.

The questionnaires were given to 276 pregnant mothers referring to the comprehensive healthcare services centers; however, finally, 261 questionnaires were analyzed due to the incomplete completion of some questionnaires. The data were then analyzed in SPSS software (version 25) using the Kolmogorov-Smirnov test to evaluate the presence or absence of normal distribution in the variables.

Due to the non-normal distribution of the studied variables, Spearman's correlation test and linear regression were used to investigate the correlation of the components of social cognitive theory with couple burnout score and its dimensions and examine the correlation between the predictors of couple burnout based on the components of social cognitive theory, respectively. It is noteworthy that this study was

derived from a master's thesis conducted on health education and promotion and was approved by the Ethics Committee of the Mashhad University of Medical Sciences, Mashhad, Iran (IR.MUMS.REC.1395.407).

Results

The mean age of pregnant women was obtained at 28.69 ± 5.47 , and the subjects were at

23.67 ± 9.91 weeks of pregnancy. The mean scores of marital burnout, physical burnout, emotional exhaustion, and mental exhaustion were calculated at 2.64 ± 0.78 , 2.28 ± 0.70 , 2.43 ± 0.86 , and 2.52 ± 0.83 , respectively. Other demographic variables and their relationship and correlation coefficient with marital burnout are presented in Table 1.

Table 1. Relationship of demographic variables with marital burnout and its dimensions

Variable	Mean±SD	r (P-value)
Age	28.69±5.47	*0.099 (0.111)
Spouse's age	32.77±5.54	*0.082 (0.185)
Years of marriage	7.57±5.07	*0.124 (0.046)
Week of pregnancy	23.67±9.91	*-0.41 (0.516)
Marital burnout	2.64±0.78	
Physical dimension	2.28±0.70	
Emotional dimension	2.43±0.86	
Mental dimension	2.52±0.83	
Variable	Number (%)	Test result
Employment		
Employed	36 (13.8)	**0.559
Housewife	225 (86.2)	
Education		
Middle school and less	40 (15.3)	**0.587
High school and diploma	96 (38.6)	
associate degree and undergraduate	113 (43.3)	
Masters and PhD	12 (4.6)	
History of abortion		
Yes	58 (22.2)	**0.404
No	203 (77.8)	
Physical and mental illness		
No	254 (97.3)	
Yes	7 (2.7)	***0.670
Planned pregnancy		
Wanted pregnancy	205 (78.5)	***0.155
Unwanted pregnancy	56 (21.5)	

* Spearman's correlation test ** Kruskal-Wallis test *** Mann-Whitney U Test

It was revealed that among the studied demographic variables, only the year of marriage had a positive and significant relationship with marital burnout ($P=0.046$), while the other components showed no significant relationship ($P<0.05$).

Table 2 tabulates the relationship of the components of social cognitive theory with marital burnout and its dimensions. According to the results of Spearman's correlation, all components of social cognitive theory, except the outcome expectation, had a significant

relationship with marital burnout ($P<0.05$ and $P=0.103$, respectively). Furthermore, observational learning showed a positive correlation with marital burnout, while the other components had an inverse correlation in this regard. The self-efficacy of overcoming obstacles was correlated with none of the marital burnout dimensions and also self-regulatory was not correlated with the mental dimension of marital burnout. Awareness and outcome value showed no relationship with the physical dimension of marital burnout.

Table 2. Spearman's correlation of social cognitive theory components with marital burnout and its components

Variable	Marital burnout	Physical dimension	Emotional dimension	Mental dimension
	r (P-value)	r (P-value)	r (P-value)	r (P-value)
Awareness	-0.146 (0.019)	-0.048 (0.448)	-0.152 (0.015)	-0.184 (0.003)
Outcome expectation	-0.102 (0.103)	-0.055 (0.378)	-0.104 (0.094)	-0.115 (0.065)
Outcome value	-0.080 (0.202)	-0.021 (0.739)	-0.087 (0.163)	-0.107 (0.085)
Self-efficacy	-0.119 (0.055)	-0.093 (0.135)	-0.084 (0.177)	-0.110 (0.077)
Self-efficacy of overcoming obstacles	-0.276 (<0.001)	-0.206 (0.001)	-0.216 (<0.001)	-0.297 (<0.001)
Access	-0.294 (<0.001)	-0.160 (<0.010)	-0.291 (<0.001)	-0.324 (<0.001)
Social support	-0.256 (<0.001)	-0.180 (0.004)	-0.254 (<0.001)	0.235 (<0.001)
Observational learning	0.188 (0.002)	-0.136 (0.028)	-0.135 (0.030)	-0.221 (<0.001)
Skills	-0.380 (<0.001)	-0.263 (<0.001)	-0.310 (<0.001)	-0.439 (<0.001)
Understanding of the situation	-0.332 (<0.001)	-0.246 (<0.001)	-0.277 (<0.001)	-0.365 (<0.001)
Self-regulation	-0.284 (<0.001)	-0.185 (<0.003)	-0.271 (<0.001)	-0.295 (<0.001)

Multiple linear regression was performed to investigate the importance of each component, and therefore, prepare the educational content for the pregnancy period. Stepwise linear

regression was also used, and all the components of social cognitive theory and the year of marriage that were significant were regressed.

Table 3. Linear regression of the effect of model components on marital burnout (Assessing the effective components of social cognitive theory on marital burnout)

Model	Non-standardized coefficients		Standardized coefficients	t	P-value
	Regression coefficient	Standard error	Regression coefficient		
Skills	-0.063	-0.013	-0.309	4.8	<0.001
Understanding of the situation	-0.053	0.017	-0.193	3.05	0.002

The Durbin-Watson test was applied to detect the lack of autocorrelation, the statistic of which was 1.56, and there was no correlation between the variables. Most of the variance inflation factors were related to the self-efficacy of overcoming obstacles calculated at 1.49. The coefficient of determination of the model was obtained at $R^2=0.15$, and the residues had a normal distribution ($P=0.256$). The final model is given in Table 3.

Discussion

Based on the research and considering the limitations of studies conducted in this field, the present study used the social cognitive theory to predict the factors that have a direct and indirect effect on marital burnout among pregnant women. Since the mean score of marital burnout in pregnant women was obtained at 2.64 ± 0.78 , the identification of the factors affecting marital burnout in pregnant

women could play a special role in improving couples' relationships and reducing psychological, emotional, and social problems during pregnancy.

The results of our study showed the existence of a relationship between the years of marriage and marital burnout, which was consistent with the findings of a study conducted by Khodadai indicating a significant relationship between marital burnout and the duration of marriage among nurses (30). This result was in line with those of a study performed by Zareh (31). The decrease in marital satisfaction in couples can be due to the increased responsibility of couples, the birth of children, and the financial problems associated with raising children (32).

In the present study, all components of social cognitive theory, except outcome expectation, had a significant relationship with marital burnout. Along with these results, the aesthetic study showed that expectation of outcome has nothing to do with mental health (18). However, in some studies, such as research carried out by Micaeli, this structure was able to predict life satisfaction (33). Outcome expectation is the prediction of possible consequences of behavioral conflict, which can be physical or psychological (34). This discrepancy can be attributed to the overlap of variables, in other words, the effects of other components are so high that they hide the effect of the outcome expectation; therefore, further studies are needed to be performed in this field.

It should be noted that the studied components of this theory included awareness, outcome expectation, outcome value, self-efficacy, self-efficacy of overcoming obstacles, access, understanding of the situation, social support, skills, self-regulation, and observational learning. All these components and the years of marriage were examined using stepwise multiple linear regression. Accordingly, it was found that two components, namely skills and understanding of the situation, were predictors of marital burnout among pregnant mothers, and these components can be used as a reference framework for designing interventions in the field of marital burnout.

In line with our results, Shamshirgaran reported a significant inverse relationship between communication skills and marital

burnout (35). In another study conducted by Alipour, the training of communication skills increased marital satisfaction and decreased depression and anxiety among pregnant women (36). Behavioral skills lead to the exchange of positive behaviors, reduction of negative behaviors, and changes in people's feelings, behaviors, and attitudes. Finally, these changes reduce the emotional burnout of couples and increase marital satisfaction (13). The social cognitive theory also emphasizes skills (21), based on which, Bandura highlights the roles of knowledge and skills to perform the behavior as crucial factors for health promotion programs to be successful (37).

In a study carried out by Aliakbari, skills and self-efficacy were reported to be among the most important predictors of health literacy. Self-Efficacy, not only helps to master a behavior but also influences the use of skills and whether they are utilized well and emphasizes the learning and developing skills (21). Self-efficacy refers to a person's belief in his/her ability to successfully accomplish a task or goal (21), while self-efficacy of overcoming obstacles is defined as an individual's confidence in overcoming obstacles while performing the behavior (34).

The results of a study conducted by Martin suggested that the best predictor of behavior was self-efficacy of overcoming obstacles (38), which was consistent with our findings. Furthermore, Jamali predicted the positive and significant correlation between self-efficacy and mental health in this study (18). The findings of another study indicated that self-efficacy played a mediating role in the relationship of social support with life satisfaction and mental health. The mentioned study also emphasized the relationship between this component and stress (39), since when people's tasks are within their perceived self-efficacy scope, they will have less anxiety and stress. However, doubts about the ability to deal with problems cause mental distress and physiological arousal (40).

Understanding the situation refers to how one perceives and interprets his/her environment (34). In a study performed by Sadeghi et al., the component of understanding the situation and perceived obstacles (i.e., self-efficacy of overcoming obstacles) had a positive

and significant correlation with general belief (41), which was partly in agreement with the results of our research. In the studies conducted on social cognitive theory, especially those in the field of mental health, this component has rarely been investigated. The component of understanding the situation refers to an individual's perception of living conditions and environment. Consequently, according to the findings of this study, it will be possible to modify and improve the component of understanding the situation in mothers' educational programs with an emphasis on the need of having a positive attitude towards living conditions and provision of more personal and environmental support. Additionally, educational interventions aimed to improve communication and marital skills can help reduce marital burnout.

According to the findings of the present study, the social cognitive theory was able to describe and predict 15% of marital burnout among pregnant women. In line with the findings of the current study, in a study performed by Abusalehi, the social cognitive theory was able to predict 42.1% of the mental health among the elderly (26). Davis Mogel showed that the use of social cognitive theory could be effective in promoting safe sexual behaviors (42).

It might be that the difference between the predictive power of social cognitive theory components in the present study and other studies is attributed to the fact that some studies only examined the predictive power of significant components, whereas, in the present study, the interactive effect of all components on marital burnout was examined. Furthermore, the number of components studied in our study was different, and even more, from those in the mentioned studies.

Discrepancies in results can have various causes, among which is probably the difference in the study population and the other is the difference in the domain of the mentioned studies from that of the present study, which due to the lack of studies in the field of factors affecting marital burnout among pregnant mothers, our citations were mostly to related articles in this field.

One of the limitations of our study was the findings obtained through self-report, meaning that the participating pregnant mothers might have been influenced by temporal, environmental, or a large number of questions and might have expressed appropriate responses for that particular time or situation or avoided expressing their feelings and behaviors correctly. On the other hand, one of the strengths of this study was the investigation of environmental and psychological factors collectively and the application of all components of social cognitive theory, as well as the use of random sampling method that provides the possibility of generalizing the results to the whole society.

Conclusion

According to the findings of the present study, the social cognitive theory was able to predict marital burnout well and the components of skills and understanding the situation were the most important factors affecting marital burnout in pregnant mothers. It is suggested to use this theory, and especially focus more on these variables, in designing educational programs to reduce physical, emotional, and psychological problems caused by marital burnout in pregnant women.

Acknowledgements

The present article was derived from a master's thesis with the design code 950205 and was conducted with the financial support of Mashhad University of Medical Sciences. The authors would like to express their gratitude to the esteemed Vice-Chancellor for Education and Research of Mashhad University of Medical Sciences, pregnant women in Gonabad city, staff of healthcare services centers in Gonabad, and all those who cooperated in this study.

Conflicts of interest

Authors declared no conflicts of interest.

References

1. Firouzbakht M, Riahi M, Tirgar A. A study of the effective factors on the women's social health: a review study in persian scientific journals. *Community Health Journal of Social Determinants of Health Research Center of Shahid Beheshti University of Medical Sciences*. 2017; 4(3): 186-196.
2. Askarian-Tavandari P, Hashemian M, Joveini H,

- Solimanian A, Rastaghi S. A Survey on the Level of Women's Health Literacy and Effective Factors in 2016: A Cross-Sectional Study. *Journal of Health System Research*. 2018; 14(1):35-40.
3. Jalalmarvi F, Kordi M, Rezaei Talab F, Mansouri Ghezeli Hesari E. The Relationship between Insomnia Severity and Marital Satisfaction in Pregnant Women. *Qom University of Medical Sciences Journal*. 2019; 12(11): 50-59.
4. Nazari H, Farhadi A, Jariayani M, Hosseinabadi R, Asgari S, Majidimehr M. Mental health of pregnant women referred to Khorramabad health centers. *Journal of Lorestan University of Medical Sciences*. 2014; 16(2): 40-48.
5. Motavalli R, Ozgoli G, Bakhtiari M, Alavi Majd H. Marital Satisfaction and Marital Intimacy in Employed and Unemployed Pregnant Women of Ardebil City. *Journal of Ardabil University of Medical Sciences*. 2009; 9(4): 315-324.
6. Mangeli M, Ramezani T, Mangeli S. The Effect of Educating about Common Changes in Pregnancy Period and the Way to Cope with them on Marital Satisfaction of Pregnant Women. *Iranian Journal of Medical Education*. 2008; 8(2): 1-9.
7. Dehghan A, Lavasani MG, Madani Y. The Relationship between Relationship Beliefs and Couple Burnout: The Mediating Role of Mindfulness. *Journal of Psychology*. 2018; 22(3): 344-357.
8. Motahari ZS, Ahmadi K, Behzadpour S, Azmoude F. The Effectiveness of Mindfulness on Reducing Marital Disturbance of Mothers with Attention Deficit Hyperactivity Disorder. *Quarterly Counseling and Psychotherapy Family*. 2014; 3(4): 591-612.
9. Soares JFF, Grossi G, Sundin O. Burnout among women: associations with demographic/ socio-economic, work, life-style and health factors. *Women's Mental Health*. 2007; 10(2): 61-71.
10. Ghorbani M, Firoozi S. The Effectiveness of Lifestyle Education on Marital Satisfaction and Boredom in Married Women in Isfahan. *Journal of Women and Society*. 2017; 8(1): 23-36.
11. Feizabadi S, Zahrakar K, Nazari AM. The effectiveness of quality of life therapy on marital burn out. *The Journal of Urmia University of Medical Sciences*. 2016; 27(9): 782-90.
12. Esmaily N, Jaervand H, Rasooli M, Hassani J. Identifying the underlying factors of marital burnout. *Journal of Women, Institute of Humanities and Cultural Studies*. 2019; 10(1): 25-51.
13. Pyraflak M, Sudanese M, Shafi Abadi A. The Effectiveness of Cognitive-Behavioral Group Couples Therapy (GCBCT) on reducing marital distress. *Quarterly Counseling and Psychotherapy Family*. 2014; 4(2): 247-267.
14. Nikoubakht N, Karimi U, Bahrami H. Couple Burnout among Fertilized and Unfertilized Women Referred to Valieasr Reproductive Center, Tehran. *Iranian Journal of Epidemiology*. 2011; 7(1): 32-37.
15. Sadeghi Sahebzaad E, Baghdari N, Kheirkhah M. The relationship between marital satisfaction and social support with maternal fetal attachment in pregnant women with a history of baby loss. *The Iranian Journal of Obstetrics, Gynecology and Infertility*. 2014; 17(106): 16-22.
16. Falahati F, Mohammadi M. Prediction of Marital Burnout Based on Automatic Negative Thoughts and Alexithymia among Couples. *Journal of Midwifery and Reproductive Health*. 2020; 8(2): 2218-2226.
17. Maghsudi M, Mohamadi S. A study on the relationship between job burnout and couple burnout of female gynecologists (Case study: Tehran). *Woman in Development and Politics (Women's Research)*. 2010; 8(3): 57-71.
18. Jamali M, Noroozi A, Tahmasebi R. Application of the basic constructs of social cognitive theory for predicting mental health in student of Bushehr University Medical Sciences 2012-13. *Iran South Medical Journal*. 2015; 17(6): 1236-1251.
19. Taghdisi MH, Dehdari T, Dehnavi A, Zarati M. Predictors of Adopting Preventive Nutritional Behaviors of Breast Cancer among Women Based on Social -Cognitive Theory variables. *Health and Development Journal*. 2020; 9(1): 19-28.
20. Jalili M, Barati M, Bashirian S. Using Social Cognitive Theory to Determine Factors Predicting Nutritional Behaviors in Pregnant Women Visiting Health Centers in Tabriz, Iran. *Journal of Education and Community Health*. 2015; 1(4): 11-21.
21. Middleton L, Hall H, Raeside R. Applications and applicability of Social Cognitive Theory in information science research. *Journal of Librarianship and Information Science*. 2018; 1(2): 1-11.
22. Mirkarimi S, Ozoni Doji R, Honarvar M, Aref L. Correlation between physical activities, consumption of fruits and vegetables and using social cognitive theory constructs in obese or overweight women referring to health centers in Gorgan. *Jorjani Biomedicine Journal*. 2017; 5(1): 42-52.
23. Rubenstein LD, Ridgley LM, Callan GL, Karami S, Ehlinger J. How teachers perceive factors that influence creativity development: Applying a Social Cognitive Theory perspective. *Teaching and Teacher Education*. 2018; 70(1): 100-110.
24. Young HN, Lipowski EE, Cline RJ. Using social cognitive theory to explain consumers' behavioral intentions in response to direct-to-consumer prescription drug advertising. *Research in Social and Administrative Pharmacy*. 2005; 1(2): 270-288.
25. Shamshirgaran M, Homaei R. Investigation Of Relationship Between Relationship Skills and Its components With Couple Burnout In Married Employees In NIDC Ahvaz. *Rooyesh-e-Ravanshenasi*. 2018; 7(1):111-134.
26. Aboosalehi A. Effect of education based on social

- cognitive theory on mental health among elderly people living in nursing homes. Presented for the MSc. Mashhad: Mashhad University of Medical Sciences; 2016.
27. Ghasemi R, Rajabi-Gilan N, Reshadat S, Zakiei A, Zangeneh A, Saedi S. The relationship of social support and self-efficacy with mental health and life satisfaction. *Journal of Mazandaran University of Medical Sciences*. 2017; 27(147): 228-239.
28. Davarnia R, Zahra kar K, Moayeri N, Shakarami M. Assess the effectiveness of couple therapy in group method to reduce women's marital burnout. *Journal of Medical Sciences, Islamic Azad University*. 2015; 25(2): 132-140.
29. Navidy F. Study and comparison of couple burnout relationship with organizational climate factors in employee education and hospitals of Tehran nurses. Presented for the MSc. Tehran, Iran: Shahid Beheshti University of Tehran; 2005.
30. Khodadadi SJ, Hajizadeh T, Amousti F, Rezaie M. The prediction of couple burnout according to the general health and marital intimacy among nurses. *Preventive care in nursing & midwifery journal*. 2016;6(2):45-53.
31. Zare B, Saffariy Jafar Abad H. Study of the Relationship between Factors Affecting Marital Satisfaction Between Married Women and Men in Tehran. *Women's Psychological Studies*. 2015; 13(1): 111-140.
32. Tavakol Z, Nikbakht Nasrabadi A, Behboodi Moghadam Z, Salehiniya H, Rezaei E. A Review of the Factors Associated with Marital Satisfaction. *Galen Medical Journal*. 2017; 6(3): 197-207.
33. Manee FM, Far SF. The study of socio-cognitive predictors of life satisfaction in university students. *Iranian Journal of Psychiatry and Clinical Psychology*. 2015;20(4):349-62.
34. Amini Moridani M, Tol A, Sadeghi R, Mohebbi B, Azam K. Assessing the Effect of Family-based Intervention Education Program on Perceived Social Support among Older Adults with Type 2 Diabetes: Application of Social Cognitive Theory. *Journal of Nursing Education*. 2015; 4(3): 30-40.
35. Homaei R. Investigation Of Relationship Between Relationship Skills and Its components With Couple Burnout In Married Employees In NIDC Ahvaz. *Rooyesh-e-Ravanshenasi Journal*. 2018; 7(1): 111-134.
36. Alipour Z, Kazemi A, Kheirabadi G, Eslami A-A. Marital communication skills training to promote marital satisfaction and psychological health during pregnancy: a couple focused approach. *Reproductive Health*. 2020; 17(1): 1-8.
37. Najimi A, Ghaffari M, Alidousti M. Social cognitive correlates of fruit and vegetables consumption among students: a cross-sectional research. *Pejouhandeh*. 2012; 17(2): 81-86.
38. Martin J, McCaughtry N, Flory S, Murphy A, Wisdom K. Using social cognitive theory to predict physical activity and fitness in underserved middle school children. *Research quarterly for exercise and sport*. 2011; 82(2): 247-255.
39. Roozbehani N, Mehdi R, Rajabi M. Application of Social Cognitive Theory for Predicting Stress in Non-Native New Students of Arak University Of Medical Sciences 2015-2016. *Journal of Urmia Nursing And Midwifery Faculty*. 2018; 16(7): 517-526.
40. Carillo KD. Social cognitive theory in is research-literature review, criticism, and research agenda. In *International Conference on Information systems, Technology and management 2010 Mar 11* (pp. 20-31). Springer, Berlin, Heidelberg.
41. Akbari-Somar N, Mohebbi B, Sadeghi R, Tol A, Yaseri M. Assessing the Predictive Factors of Self-Care, Public Knowledge, and General Belief in Rational Use of Antibiotics, Based on Social Cognitive Theory. *Journal of Health System Research*. 2018; 13(4): 507-514.
42. Dos Santos LM. Promoting safer sexual behaviours by employing social cognitive theory among gay university students: A pilot study of a peer modelling programme. *International Journal of Environmental Research and Public Health*. 2020; 17(5): 1804.