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# Prediction of Marital Satisfaction Based on Health Anxiety and Self-Efficacy with the Mediation of Mindfulness in Women with Multiple Sclerosis

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#### Abstract

**Objective**: The purpose of this study was to predict marital satisfaction based on health anxiety and self-efficacy with the mediation role of mindfulness in women with multiple sclerosis.

**Method:** The present research method was descriptive-correlational using structural equation modeling (path analysis). The statistical population included 14899 married women with diplomas and higher education who were members of the Tehran MS Association in 2021. Using the Cochran formula, 342 women were selected as research samples through convenience sampling. All participants responded to four questionnaires, including Olson et al.'s Marital Satisfaction, Salkovskis et al.'s Health Anxiety, Schwarzer and Jerusalem's Self-efficacy, and Baer et al.'s Mindfulness questionnaires.

**Results**: The results showed the direct effect of marital satisfaction through self-efficacy and health anxiety was significant (P<0/05). Also, the indirect effect of marital satisfaction through mindfulness was significant (P<0/05). **Conclusion**: According to the results, mindfulness plays a mediating role in the relationship between health anxiety, self-efficacy, and marital satisfaction.

Keywords: Marital satisfaction, Health anxiety, Self-efficacy, Mindfulness, Multiple sclerosis.

## Introduction

Multiple Sclerosis (MS) is an inflammatory disorder of the central nervous system that destroys the myelin sheath in the brain and spinal cord (Dortaj et al., 2020) and causes severe problems in body systems and body image (Özen, Karataş & Polat, 2021). MS is recognized in young people, especially in the age range of 20 to 40, and is more prevalent in women than men (Aidin & Onger, 2022). Disease progression is increasingly accompanied by lifealtering neurological, psychiatric, and psychological symptoms that affect patients and their families (Treder-Rochna, 2020). However, as the marital subsystem forms the foundation of family life, the family satisfaction of multiple sclerosis patients and their spouses is challenging and vital (Petrikis, Baldouma, Katsanos, et al., 2019).

Marital satisfaction refers to the degree of satisfaction from meeting needs, expectations, and desires in marriage - a state of mind that can only be described by the spouse and one's overall personal evaluation of the marriage (Du Plooy & de Beer, 2018). MS can negatively affect marital satisfaction (Namvar, 2021). A patient with MS might have a low or moderate level of marital satisfaction (Özen et al., 2021; Aydin, Onger & Terzi, 2021). In addition, it is demonstrated that depression, anxiety disorder, and sexual dysfunction negatively affect marriage and life satisfaction; it also influences the marital satisfaction and life of the person with MS (Lu et al., 2020).

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In chronic diseases, evidence shows that a moderate to high level of health anxiety is very common in patients. Health anxiety is the fear and worry that occurs in response to living with a chronic illness (Lebel et al., 2020). We can also state that health anxiety represents the misinterpretation of body feelings (Lee & Crunk, 2020). People with health anxiety have dysfunctional and distorted beliefs about their health and focus on minor physical problems and vague physical sensations (Shabahang et al., 2021).

Research has shown that 37 to 40% of MS patients suffer from anxiety, which strongly affects the quality of life of these patients (Abedzadeh Yami et al., 2021). Anxiety influences more than 20% of MS patients (Leavitt et al., 2020). Anxiety disorders are often overwhelming not only for the sufferers but also for their intimate partners. Many studies show that anxiety disorders unpleasantly affect the patient's social functioning, including living with a partner. However, our knowledge of the impact of anxiety disorder on one or both marital or living partners is still limited (Lebel et al., 2020).

Another factor that is related to marital satisfaction is self-efficacy. Self-efficacy in love relations refers to one's belief in the ability to engage in relationshipaffirming activities such as communicating freely with one's partner, providing support, establishing comfort, and controlling or suppressing hurtful emotions and anger (Anyamene, Nwokolo & Etele, 2021). MS symptoms and disabilities undermine patients' self-efficacy. Previous studies on patients with long-term illnesses showed that self-efficacy positively impacts mental adjustment to the disease after controlling the clinical variables and depressive symptoms (Calandri et al., 2018). When couples have high self-efficacy, their ability to achieve life tasks and their resilience in facing life's challenges save them from emotional divorce (Rasheed, Amr & Fahad, 2020). Also, McNulty (2017) showed that marital satisfaction is correlated with the ability to meet expectations. In spouses, the ability to meet high demands was positively correlated with satisfaction; in contrast, the inability to do so was negatively related to satisfaction.

Mindfulness is another factor that seems to influence marital satisfaction. Numerous studies have shown that mindfulness positively correlates with relationship outcomes such as marital quality and satisfaction with self and partner in marital and non-marital relationships (Gesell et al., 2020; Iida & Shapiro, 2017). Some studies have shown that this construct can play a moderating role in predicting constructs related to marital issues like marital adjustment (Zareie, 2019); therefore, this construct was examined as a mediating variable in this study. Kabat-Zinn (2003) defines mindfulness as "an awareness of events with full attention to the goal, being in the present moment without judgment of the moment-to-moment experience of what happens." Mindfulness practice mainly focuses on awareness and non-judgmental acceptance meaning that one does not view her internal conditions as good, bad, right, or wrong, but accepts them as they are (Oguntuase & Sun, 2022).

Recently, there has been more attention to the relational aspects of mindfulness. Erus (2019) explained mindfulness in interpersonal relationships as listening carefully to the spouse's words during interaction and communication, awareness of self and spouse's feelings, accepting feelings and thoughts without judgment, and reacting to the spouse's behaviors, without intuitiveness and through self-regulation (Deniz, Erus & Batum, 2020). Some evidence also shows that mindfulness is associated with less stress, better communication patterns, compassion, and intimacy. Accordingly, it is no surprise that mindfulness is associated with more integrated and closer interpersonal relationships (Sigala, 2020).

Regarding the above-mentioned issues, it can be said that the impact of chronic debilitating diseases such as MS and related problems such as the influence of accompanying disabilities on marital satisfaction in all dimensions is not concealed from anyone. On the other hand, according to Trader-Rachna's research (2020), this disease increases the probability of divorce, and it has been estimated that 66 percent of married couples divorce, especially when the wife has multiple sclerosis. It has also been found that the female gender, early diagnosis (before age 36), and childlessness increase the risk of relationship breakdown. Therefore, it is necessary to research to investigate the marital satisfaction of women with multiple sclerosis. Reviewing past research, especially in Iran, the research examining the variables related to marital satisfaction in women with MS is limited, and no study has explicitly investigated health anxiety and self-efficacy as predictors and mindfulness as mediators with marital satisfaction in women with multiple sclerosis. Due to the research gap and the importance of examining marital satisfaction in women with multiple sclerosis, the present study sought to answer whether health anxiety and self-efficacy variables can predict marital satisfaction in women with multiple sclerosis with the mediation of mindfulness.

## Method

#### **Participants and Procedure**

The research method was descriptive-correlational, and the statistical population included 14899 married women with diplomas and above registered in Tehran MS Association in 2020. According to the special conditions of people with multiple sclerosis and using Cochran's formula, 342 people were selected as the research sample through convenience sampling. The inclusion criteria for the current study were being female, married, having a diploma or higher education, and a willingness to participate in the research. The exclusion criteria of the research were suffering from a severe disease other than MS, using psychiatric drugs, and unwillingness to participate in the research. The research instruments for collecting data are listed in the following.

The ethical considerations of the study, including obtaining informed consent from the participants, the absence of compulsion to participate in research, assuring the participants to keep the information confidential, and announcing the research results without mentioning the participants' characteristics, were observed.

### Measures

Enrich's Marital Satisfaction Scale (short form): The original version of this questionnaire was made by Enrich in 1998 and contains 115 questions. Its short form of 47 questions was compiled by Suleimanian in 1994. In this research, the 47-question form of this questionnaire was used. The scoring of this questionnaire is based on a five-point Likert scale (from completely agree to completely disagree). The lowest score is 47, and the highest score is 235. Its nine subscales deal with personality issues, marital relationships, conflict resolution, financial management, leisure time, sexual relations, marriage and children, relatives and friends, and religious orientation. Suleimanian (1994) reported the internal correlation of the test as 0.93 for the long form and 0.95 for the short form. This questionnaire was used in the study of Lari and Olson (1993), and the alpha coefficient of the questionnaire was reported from 0.71 to 0.94. In Asoodeh's research (2009), the alpha coefficient of the questionnaire with 365 couples was 0.77. The correlation coefficient of the scale with the marital satisfaction scales was from 0.32 to 0.42 and with the family satisfaction scales from 0.41 to 0.60, which shows the construct validity of the scale. The reliability of this questionnaire was obtained at 0.75 in the research of Najarzadegan and Farhadi (2019) using Cronbach's alpha coefficient,

with the obtained validity of 0.87.

Health Anxiety Questionnaire: This questionnaire is a self-report scale with 18 items developed by Salkovskis et al. in 2002. This scale examines healthrelated concerns, attention to physical feelings or concerns, and the dreadful consequences of having a disease. Each item contains four sentences scored from 0 to 3, and the respondents should choose the sentence that best describes them. Higher scores (0-54) indicate more health anxiety in the respondent. Abramowitz et al. (2006) reported the validity convergent correlation coefficient of the short form of health anxiety inventory with the illness attitude scale, the anxiety sensitivity scale, Beck's uncertainty tolerance, and anxiety questionnaires at 0.63, 0.56, 0.41, and 0.42, respectively. Bagheri Sheikhangfesheh, Taj Bakhsh, and Abolghasemi (2019) in Iran reported the validity and Cronbach's alpha coefficient of this scale at 0.74 and 0.82, respectively. Cronbach's alpha coefficient of the health anxiety variable was 0.79 in this study.

*Self-efficacy Ouestionnaire:* This 10-item questionnaire was developed in 1979 by Schwarzer and Jerusalem. Respondents express their level of agreement with each option on a four-choice scale from 1 for not true at all to 4 for completely true. A person's self-efficacy score is the total score of 10 items in the range of 10 to 40. This questionnaire has sufficient validity and reliability. Schwarzer et al. (1997) obtained internal consistency coefficients of self-efficacy scale revisions for students in Germany at 0.84, Costa Rica and Spain at 0.81, and China at 0.91. In Iran, Rajabi (1996) reported Cronbach's alpha coefficients for the whole scale of 0.82, for students of Shahid Chamran University of Ahvaz 0.84, and for psychology students of Azad University of Maroodasht 0.80. He also reported the concurrent validity coefficient for the self-efficacy questionnaire and the Rosenberg self-esteem scale at 0.30 for 318 respondents, 0.20 for the psychology

students of Shahid Chamran University of Ahvaz, and 0.23 for the psychology students of Maroodasht Azad University. In this study, the reliability coefficient was obtained using Cronbach's alpha method of 0.83.

Five-factor mindfulness questionnaire (FFMQ): The five-factor mindfulness questionnaire with 39 items was developed by Baer et al. (2006). The respondents answer each question on a five-point Likert scale (never = 1 to always = 5). The minimum score in this test is 39, and the maximum score is 195. The mindfulness questionnaire has five factors, observation, description, conscious action, nonjudgment, and non-reaction. Using Cronbach's alpha method, the internal consistency of the subscales of this tool has been reported from 0.86 to 0.95 (Van Dam et al., 2009). Also, this tool has convergent, divergent, and construct validity (Baer et al., 2006). In a study conducted on the validation and reliability of this questionnaire on students in Iran, its test-retest reliability was 0.84, and its internal consistency was reported at 0.83 (Ahmadvand et al., 2013). In this study, the reliability coefficient was obtained using Cronbach's alpha method of 0.81.

For collecting data, the questionnaires were designed online first, and after obtaining the consent of the officials of the Tehran MS Association, they were provided to this association to send the link of the questionnaires to the patients who met the inclusion and exclusion criteria of the study. In the end, the collected data were analyzed using Pearson correlation and path analysis using SPSS version 22 and AMOS version 20 statistical software.

## Results

The demographic information indicated that among 342 subjects, 82 people (23.97%) were between 20 and 30 years old, 184 people (53.80%) were between 31 and 40 years old, and 76 people (22.22%) were more than 41 years old. Also, among them, 102

(29.82%) had a diploma education, 149 (43.56%) had a bachelor's degree, and 91 (26.60%) had a master's degree or higher. Moreover, regarding the history of disease in the subjects, 95 subjects (27.77%) had less than three years, 179 (52.33%) had 3 to 5 years, and 68 (19.88%) had more than five years of history.

The Kolmogorov-Smirnov test was used to test the normality of research variables. Table 1 shows that the significance level obtained for all four variables is higher than 0.05, indicating that the null hypothesis of data normality is not rejected. As a result, the research variables had a normal distribution; therefore, parametric methods were used to test the hypotheses.

As Table 2 shows, there is a significant negative correlation between health anxiety and marital satisfaction and a positive and significant correlation between self-efficacy and mindfulness with marital satisfaction. On the other hand, there is a significant negative correlation between mindfulness and health anxiety and a significant positive correlation between mindfulness with self-efficacy and marital satisfaction.

The non-linearity assumption of data distribution was established because the tolerance coefficient

Table 1. Testing the normality of the variables

values for health anxiety (0.571), self-efficacy (0.270), and mindfulness (0.448) were less than 0.1, and the inflation factor values for each of the predictor variables of health anxiety (1.751), self-efficacy (3.704), and mindfulness (2.232) were not higher than 10. Therefore, according to Meyers et al. (2006), the tolerance coefficient less than 0.1 and the variance inflation factor higher than 10 indicate collinearity of variables. Observing the research assumption, it was possible to use the structural equation test with valid results. The final structural model and path coefficients are shown in Figures 1 and 2.

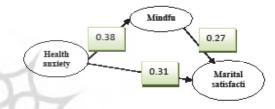


Figure 1. Structural model of the relationship between health anxiety, mindfulness and marital satisfaction



**Figure 2.** The structural model of the relationship between self-efficacy, mindfulness and marital satisfaction

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Research variables	No.	Z value	Sig. level
Health anxiety	342	2.46	0.09
Marital satisfaction	342	1.38	0.07
Self-efficacy	342	2.76	0.08
Mindfulness	342	2.15	0.09

Table 2. Descriptive	results and	correlation	matrix	of research	variables

Descriptive Statistics			The correlation coefficient				
	Variable	Mean	SD	1	2	3	4
1	Health anxiety	27.4	10.2	1			
2	Self-efficacy	74.30	16.4	-0.227**	1		
3	Mindfulness	125.46	11.35	-0.253**	0.189**	1	
4	Marital satisfaction	163.79	20.38	-0.538**	0.424**	0.324**	1

Testing the mediating hypotheses of the research based on the bootstrap method, the unstandardized **Table 3.** Direct path coefficients of research variables confirmed the negative and significant relationship between health anxiety and the marital satisfaction of these people. Reviewing the previous research

Research variables	Unstandardized	Standardized	Standard Error	Significance
Research variables	parameter (b)	parameter ( $\beta$ )	(S.E)	test (t)
Health anxiety ⇔ Mindfulness	-0.12	-0.38	0.03	-2.26
Health anxiety ⇒ Marital satisfaction	-0.19	-0.31	0.02	-3.06
Self-efficacy ⇒ Mindfulness	0.24	0.36	0.14	5.23
Self-efficacy ⇒ Marital satisfaction	0.36	0.41	0.11	4.32
Mindfulness ⇒ Marital satisfaction	0.24	0.27	0.06	2.52

Table 4. General, direct, and indirect standard coefficients in the model

Paths	Direct effect	Indirect effect	Total effect	Explained Variance
Health anxiety to marital satisfaction (mediated by mindfulness)	-0.31	-0.10	-0.41	0.38
Self-efficacy to marital satisfaction (mediated by mindfulness)	0.41	0.09	0.50	0.44

and standardized estimation coefficients of the paths of the proposed model to examine the relationship between the underlying variables (direct, indirect, and general effects) derived from the structural model are reflected in Tables 3 and 4.

According to the results shown in Table 4, the overall effect of health anxiety on marital satisfaction is equal to -.41. Also, the explained variance was equal to 0.38, indicating that health anxiety predicts 38% of the variance of marital satisfaction. It is also observed that the overall effect of self-efficacy on marital satisfaction is equal to 0.50. In addition, the explained variance is equal to 0.44, which means that health anxiety predicts 44% of the variance of marital satisfaction.

## **Discussion and Conclusion**

The present study was conducted to investigate the prediction of marital satisfaction based on health anxiety and self-efficacy mediating by mindfulness in women with multiple sclerosis. The findings showed that no research was found to specifically deal with the relationship between health anxiety and marital satisfaction. However, regarding the negative relationship between anxiety and marital satisfaction in physical or chronic diseases, the result of this study is in line with the findings of some researchers such as Tugard et al. (2018), Blakey and Abramowitz (2017), Libel et al. (2020), Hedayati Dana and Saberi (2013).

Kasalova et al. (2017) state that anxiety predicts a low level of marital satisfaction, and, generally, anxiety disorders often have destructive effects on interpersonal relationships and lead to a decrease in marital satisfaction. Because of its nature and symptoms, anxiety negatively affects married life, and there is usually a strong and negative relationship between anxiety disorders and marital turmoil. Hayter, Salkovskis, Silber, and Morris (2016) believe that the concept of health anxiety, i.e. "disease worry", has a stronger relationship with the tendency to attribute vague physical changes to physical causes in patients with MS compared to patients with other diseases with an unpredictable period.

Health anxiety affects the quality of satisfaction of people with MS because it probably makes the sick person feel sicker and more worried, and this feeling negatively affects their perception of life conditions. Consequently, the satisfaction, love, and affection from life decrease. Health anxiety is associated with a significant reduction in quality of life and predicts marital hostility and low levels of marital satisfaction.

The findings of this study confirmed the positive and significant relationship between self-efficacy and marital satisfaction of women with multiple sclerosis. This result is in agreement with the research findings of Anyamene, Nwokolo and Etele (2021), McNulty (2017), Weiser and Weigel (2016), Mahmoud and Ali (2014), Rajaei and Bastani (2018), Pourbafarani, Mazaheri, and Hassanzadeh (2017) and Meshaal et al., (2015).

In explaining the result of this hypothesis, we can refer to the research results of Anyamen et al. (2021). They believe that at different stages of marriage, many people may face challenging situations such as the suffering of one of the spouses from a chronic disease that challenges their cognitive and psychological abilities. In such circumstances, their self-efficacy can increase their thinking, problemsolving, promoting well-being, and facilitating social functioning. When these abilities are under control, they can help a person cope with the challenges required to achieve marital satisfaction.

Individuals with high self-efficacy are likely to be confident in their ability to engage in relationshipaffirming behaviors. They are more prone to foster positive emotional and behavioral functioning that can enhance one's ability to communicate with others and convey a pleasant attitude that can facilitate positive marital relationships. Thus, their self-efficacy can determine how much effort they will put forth and how long they will persist in a task despite obstacles or adverse experiences. Those with a strong sense of efficacy are likely to put more effort into mastering challenges. Since self-efficacy beliefs are an introduction to people's motivation and wellbeing, as long as people believe that their activities do not achieve the desired goals, they do not have much enthusiasm for work and perseverance in solving their life problems. Thus, couples with high self-efficacy, have more motivation and perseverance to solve their relationship problems; therefore, they make more efforts to improve their relationships, and as a result, they experience better marital satisfaction.

On the other hand, the research findings confirmed the mediating role of mindfulness in the relationship between health anxiety and marital satisfaction of women with multiple sclerosis. The findings of the path analysis showed that there is a significant relationship between health anxiety and marital satisfaction through mindfulness. This result is consistent with the research findings of Kashiwazaki, Takebayashi, and Murakami (2020), Deniz, Erus & Batum (2020), Quinn-Nilas (2020), Petricone-Westwood et al. (2019), Pratscher et al. (2018), Adair, Boulton, and Algoe (2018), Luberto, Magidson, and Blashill (2017), Esmailzadeh and Akbari (2021), Bloukian and Watankhah (2021), Faruzesh Yakta et al. (2018), and Bahram Masiri and Kian Erthi (2018).

Petricone-Westwood et al. (2019) believe that mindfulness-based interventions may promote the interventionist's exposure to and acceptance of previously feared internal experiences. Luberto, Magidson, and Blashill (2017) state that the ability to pay attention and accept internal experiences may help people with health anxiety to A) become aware and accept bodily sensations, B) respond consciously to these feelings instead of automatically reacting to them, C) stay in the present moment instead of getting caught up in future fears, and D) identify early warning signs to prevent intensification of anxiety. Higher levels of mindfulness are also supposed to help individuals with health anxiety pay attention to emotional distress and physical sensations openly and acceptably, prevent catastrophic misinterpretations of bodily sensations and minimize the need for reassurance-seeking behaviors.

O'Brien et al. (2018) believe that awareness focused on present experiences (act with awareness) may help people with multiple sclerosis and health anxiety cope with anxious distress in response to a health threat because this action disrupts negative iterative thinking. Greater levels of nonjudgment may help these individuals better tolerate emotional distress in response to health signals by enhancing acceptance of bodily sensations and the negative self-evaluations that occur in response to them and consequently reduce the motivation for safetyseeking behaviors (i.e., internal feelings are no longer evaluated as "dangerous").

Likewise, lack of reactivity may enable individuals with health anxiety to refrain from immediately and automatically engaging in behavioral strategies to reduce distress, helping them learn by experience that distress is something they can tolerate. There may be a similar interpretation in the significant association between greater non-reactivity and lower levels of uncertainty intolerance. That is, non-reactivity may allow individuals to overcome automatic tendencies to engage in behaviors aimed at reducing the distress caused by uncertainty about symptoms and health status.

Mindfulness allows the patient to use metacognitive and innovative behavioral strategies to focus attention and avoid rumination and the tendency to worry about health. This ability in married life enables the patient to expand her thoughts and effectively remove unpleasant feelings from married life (Bossio, Basson, Driscoll, Correia & Brotto 2018).

The research findings also confirmed the mediating role of mindfulness in the relationship between selfefficacy and marital satisfaction of women with multiple sclerosis. The results of the path analysis showed that there is a significant relationship between self-efficacy and marital satisfaction through mindfulness. This result is in line with the research findings of Oguntuase and Sun (2022), Deniz, Erus, and Batum (2020), Bayır and Aylaz (2020), Lenger (2017), Krafft, Haeger, and Levin (2017), Esmailzade and Akbari (2021), Ehsani et al. (2021), Raisi, Kehrazai, and Thanagovi Mohrar (2020), Soleimani et al. (2020), Karamati, Rahmani, Rahmani, and Alizadeh Mousavi (2019), Solati, Mardani, Ahmadi, and Danae (2018), Faruzesh Yakta et al. (2018), and Bahram Masiri and Kian Erthi (2018).

Ogantuz and Sun (2022), using mindfulness interventions in their research, have shown that people who are present at the moment and aware of the task at hand have higher coping self-efficacy and can respond and cope with difficult situations without automatic and maladaptive reactions because they are open to new perceptual issues, tend to be more creative, and are better able to deal with challenging thoughts and feelings without being overwhelmed or held back.

In explaining the results, we can state that since mindfulness strengthens physical and mental performance, it is not far-fetched to expect people with mindfulness to have a more positive attitude toward their abilities and cope with anxiety and worry more successfully (Kennedy et al., 2018). On the other hand, when people focus on the existing reality with a non-judgmental attitude, they can better manage their internal and external behaviors in the face of problems and stress.

On the other hand, mindfulness is an important

underlying factor in achieving freedom because it is an effective way to eliminate and stop one's mental pressure; therefore, the significance of managing the mind becomes more evident. To manage the mind, it is necessary for people to know the laws of the mind correctly and to use their maximum abilities by managing them. Mindfulness is an effective strategy to reach the maximum capacity of the mind and control, or in other words, mastering it and ultimately increasing the feeling of self-efficacy (Huijbers et al., 2015). On the other hand, a patient with mental awareness can understand and perceive the physical phenomena and events of married life more easily and try to use logical, rational, and coherent strategies in different situations of married life, which leads to a coherent and reasonable attitude towards their marital life experiences and improved marital satisfaction (Deniz, Erus & Batum, 2020). In other words, mindfulness through the integration of happiness and a clear view of marital life experiences can bring about positive changes in the patient's mental state and increase marital satisfaction. As a result, a patient with higher mental awareness can create a dynamic and flexible environment in her life due to high self-efficacy, mastering at the right time, and not being afraid of life changes (Bossio, 2018). Among the limitations of the present research, we can point to the research sample, that is, educated married women with multiple sclerosis, who belong to a specific group of community, so the generalization of the results to other communities should be done with caution, and also the use of a questionnaire as a data collection tool has limitations.

According to the results, we can state that considering the significant role of women in the family and community and also the need to pay attention to their physical and psychological health, the research authors suggest that MS associations and psychological clinics in public and private hospitals, in addition to medical interventions, provide the mindfulness training programs both individually and in groups to reduce health anxiety and increase selfefficacy and marital satisfaction of women with MS. We also suggest that in future research, a similar study using the male gender, other chronic diseases, and different age groups be conducted by other research methods such as comparison or interviews. Moreover, examining other variables such as selfcompassion as a moderating or mediating role in the relationship between health anxiety and self-efficacy with marital satisfaction is recommended.

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