## Original Article

# Mediatory effects of quality of life on the relationship between lifestyle and marital satisfaction among employed women

Fahime Rajabi[1], Rohollah Khodabandelou[2]

[1] Department of Educational Sciences, Payame Noor University, Tehran, Iran

[2] Postdoctoral Researchers, Faculty of Educational Sciences and Psychology, Al-Zahra University, Tehran. Iran

**Corresponding author and reprints:** Fahime Rajabi. Department of Educational Sciences, Payame Noor University, Tehran, Iran.

**Email:** fahimmehrajabi@gmail.com

## Abstract

**Background:** Marital satisfaction has been identified as one of the most important determinants of healthy and quality functions of family life. The present study aimed at examining the mediatory effects of quality of life in the relationship between lifestyle and marital satisfaction among employed women.

**Methods:** In the context of a cross-sectional study, 120 married employed women were studied in Abadeh, Iran. Lifestyle Questionnaire (LSQ) including 70 items was used to evaluate different aspects of participant's lifestyle. The Short Form Health Survey (SF-36) questionnaire was used to assess the health-related quality of life. Also, ENRICH Marital Satisfaction Questionnaire, including 35 items, was used to examine marital satisfaction. Data analysis was done using IBM SPSS Statistics for Windows, Version 24.0., running Pearson's correlation coefficient, and Structural Equation Modelling using AMOS.

**Results** The mean age of participants was 38.9 (9.84). Also, 58% (70) of participants had a bachelor's degree, 36 (30%) had associate degrees, and 14 (12%) had masters and above. The results showed that there was a significant relationship between lifestyle and quality of life ($r=0.061$ and $P<0.001$). Also, there was a correlation between lifestyle and marital satisfaction ($r=0.039$ and $P<0.001$), and a significant relationship between quality of life and marital satisfaction ($r=0.058$ and $P<0.001$). It was also found that the quality of life partially mediates the relationship between lifestyle and marital satisfaction ($\beta=0.32$, $P<0.001$).

**Conclusion:** Lifestyle based on cooperation and common goals leads to a life of marital satisfaction. By modifying their lifestyle, married employed women can amend their selfish tendencies and choose goals with high social orientation.

## Introduction

Healthy women build healthy families, and healthy families build healthy societies. Therefore, in order to have a healthy society, attention must be paid to women health. Having a lifestyle consistent with the culture of the community will help the health of women (1). Lifestyle as the critical factor of marital satisfaction, that includes a person's goal, self-concept, and feelings towards others and attitude toward the world. Pourmeydani et al. considers lifestyle, as innovation which is the result of dealing with limitations,

barriers, contradictions, and crises that individuals face in their route toward their ideal (2). Lifestyle is important mostly because it has an impact on quality of life and prevention of diseases.

Marital satisfaction can be considered as the genuine feeling of gratification, satisfaction and pleasure experienced by family, when they consider all aspects of their marriage. Marital satisfaction has a direct and significant impact on the quality of life. Appropriate lifestyle covers healthy family and a healthy society, like an umbrella (5-7). In the view of the fact that families in general and woman in particular create mission and highlight core values, lifestyle, and marital satisfaction play critical roles in inculcating these values (19). It is estimated that, through these values, every family can achieve their individual and group goals. Lifestyle and quality of life are significantly linked with marital satisfaction (20-24). Therefore, one may conclude that lifestyle and quality of life can certainly predict marital satisfaction (12).

The utility of family research is limited without explicating the processes that occur within the relationship between lifestyle and marital satisfaction together with mediatory variables. So, the present study aimed to examine mediatory effects of quality of life on the relationship between life style and marital satisfaction.

**Methods**
A total of 120 employed and married women, selected using convenience sampling method, participated in the present cross-sectional study in Abadeh city, Iran. A thorough review of previous studies (16, 19, 20, and 24) and recommended sample size resulted in consensus over a sufficient sample size of 120 to test multiple covariance hypotheses in a structural equation modelling (25).

Lifestyle Questionnaire (LSQ), developed by Lali et al, was used to examine lifestyle (12). This questionnaire includes 70 items, measuring different aspects of lifestyle. Table 1 presents different aspects of the scale.

The response had a 5 point Likert scale in which choices varied from "Strongly Disagree" to "Disagree" to "Neutral", to "Agree" to "Strongly Agree. The content validity of the scale was examined by experts and its reliability was determined to be 0.91 using Cronbach's alpha coefficient. The reliability of the questionnaire was confirmed by previous studies in Iranian population (20).

Health-related quality of life was reflected in the present study by the score that a person obtained in the Short Form Health Survey (SF-36) questionnaire.

Table 1. Components of LSQ

| No | Aspects | Items |
|----|---------|-------|
| 1 | Physical health | 1-8 |
| 2 | Exercise and health | 9-15 |
| 3 | Weight control and food control | 16-22 |
| 4 | Prevention of diseases | 23-29 |
| 5 | Psychological health | 30-36 |
| 6 | Spiritual health | 37-42 |
| 7 | Social health | 43-49 |
| 8 | Avoidance of medicines | 50-55 |
| 9 | Drugs | 56-63 |
| 10 | Environmental health | 64-70 |

This questionnaire includes 36 items and consists of eight subscales, including physical performance, physical role playing, body pain, general health, vitality, social performance, emotional role playing, and mental health. SF-36 consists of eight scaled scores, which are the weighted sums of the questions in their section. Each scale is directly transformed into a 0–100 scale on the assumption that each question carries equal weight. Lower scores indicating worse quality of life. This questionnaire provides two general measurements of function: an overall score in the physical component, which also measures the physical aspect of health, and an overall score in the psychological component, which evaluates the psychological-social aspect of health. The Cronbach's alpha in the eight subscales was calculated to be between 0.70 and 0.85. Cronbach's alpha coefficient of this questionnaire was confirmed by the previous studies (16, 19, 20, 22).

ENRICH Marital Satisfaction Questionnaire was used to examine marital satisfaction. ENRICH Marital Satisfaction Questionnaire has 4 subscale and 35 items. Items 1-5-9-13-17-21-24-27-30-35 are associated with marital satisfaction, items 2-6-10-14-18-22-25-28-31-34 are related to communication, items 3-7-11-15-19-23-26-29-32-33 are associated with conflict resolution, and items 4-8-12-16-20 with idealistic distortion (14). The scale includes five-point Likert type items of "strongly disagree", "disagree", "neither agree nor disagree", "agree", and "strongly agree,", which are assigned scores from 1 to 5, respectively. Items 3-5-6-7-10-13-14-18-19-21-22-23-26-27-28-29-32-33-34 are reverse-scored. In other words, in these items, score 1 is assigned to "strongly agree" and 5 is assigned to "strongly disagree", respectively. High scores indicate high marital satisfaction. The reliability of the subscales was found to be 0.86 for marital satisfaction, 0.80 for communication, 0.84 for conflict resolution, and 0.83 for idealistic distortion (13). The reliability of this scale was confirmed by other studies (13, 23). The reliability of the instrument was found to be 0.85 in Alipor et al. (20) and 0.90 in Mohammadi et al study (24).

Data analysis was done using IBM SPSS Statistics for Windows, Version 24.0. Descriptive analysis and Pearson's correlation coefficient was used. To assess direct and indirect relationships among variables, a two-step procedure using the structural equation modelling (SEM) was followed. SEM was utilized to test the fitness of the model and to provide evidence of discriminate validity through chi-square difference tests.

Table 2. Fit Indices of the Hypothesized Mode

| Fit index | | Hypothesized model | Recommended value |
|---|---|---|---|
| Absolute Fit | $x^2$/df | 1.925 | $\leq 3$ |
| | RMSEA [a] | 0.055 | $\leq 0.08$ |
| Incremental Fit | IFI [b] | 0.909 | $\geq 0.9$ |
| | CFI [c] | 0.908 | $\geq 0.9$ |
| Parsimony Fit | PNFI [d] | 0.919 | The higher is better |

[a] Root Mean Square Error of Approximation
[b] Incremental Fit Index
[c] Comparative Fit Index
[d] Parsimony Normed Fit Index

## Fit Indices of the Model

In order to test fit model, researchers need to check the goodness-of-fit for the model. Goodness-of-fit in a structural model explains how well a hypothesized model reproduces a new covariance matrix. This matrix assumes that all constructs are correlated with each other (25).

To examine this assumption, separate regression tests as recommended by Baron and Kenny (17) and Hayes (18) methods were applied.

## Results

The mean age of participants was 38.9, with a standard deviation of 9.84. Also, 58% (70) of participants had a bachelor's degree, 36 (30%) had associate degrees, and 14 (12%) had masters and above. Moreover, 82 (68%) of the participants had at least one child. Table 3 shows the lowest and highest scores, mean, and standard deviation of all research variables.

According to Table 3, the means of life style, life quality, and marital satisfaction were 168.45, 71.3, and 64.70, respectively.

The relationship between life style (as measured by LSQ), Quality of life (as measured by SF-36), and Marital Satisfaction (as measured by ENRICH Marital Satisfaction Questionnaire) was investigated using Pearson product-moment correlation coefficient. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity, and homoscedasticity. There was a strong, positive correlation between the two variables (lifestyle and quality of life), r=0.61, n=120, $P<0.001$, and high levels of life style associated with high levels of quality of life. Table 3 shows that there was a low, positive correlation between the two variables (lifestyle and marital satisfaction), r=0.39, n=120, $P<0.001$, and high levels of life style associated with high levels of marital satisfaction. Table 4 also showed the relationship between quality of life and marital satisfaction. There was a moderate, positive correlation between the two variables, r=0.58, n=120, $P<0.001$, and high levels of life style associated with high levels of marital satisfaction. After applying inter-construct correlations, a better model fit was achieved as shown in Table 5. The model's chi-square was 3350.753 with 1746 degree of freedom ($P<0.05$), and the normed fit was 1.925, less than the acceptable level (3). Additionally, the model Incremental Fit Index (IFI) was calculated to be .909 and Comparative Fit Index (CFI) was .908. Moreover, the Parsimony Normed Fit Index (PNFI) was .919 and the Root Mean Square Error of Approximation (RMSEA) was .055.

Table 3. Descriptive statistics of research variables

| Variables | Minimum | Maximum | Mean (SD) |
|---|---|---|---|
| Lifestyle | 85 | 201 | 168.4 (8.96) |
| Quality of life | 35 | 96 | 71.3 (6.44) |
| Marital satisfaction | 39 | 92 | 64.7 (5.04) |

Table 4. Correlations between measures of lifestyle, Quality of life, and marital satisfaction

| Variables | Lifestyle | Quality of life | Marital satisfaction |
|---|---|---|---|
| Lifestyle | 1 | | |
| Quality of life | 0.61[*] | 1 | |
| Marital satisfaction | 0.39[*] | 0.58[*] | 1 |

[*]$P<0.001$

Table 5. The Results of Paths H1 to H3 (Hypothesized model)

| No | Casual path | | Estimate* | β | *P* | Supported |
|---|---|---|---|---|---|---|
| 1 | Lifestyle | Quality of life | 0.485 | 0.334 | <0.001 | Yes |
| 2 | Quality of life | Marital Satisfaction | 0.081 | 0.122 | 0.005 | Yes |
| 3 | Lifestyle | Marital Satisfaction | 0.549 | 0.573 | <0.001 | Yes |

* Unstandardized Regression Weight

The result of the model after respecification showed a good overall fit because the measures ($x^2$/df, IFI, CFI, RMSEA, and PNFI) were all within the acceptable limits.

*Testing of Hypotheses*

Two sets of hypotheses were examined. The first set included three relationships between the main constructs (lifestyle, quality of life, and marital satisfaction) of the model and the second set was one hypothesis which was testing the mediatory effects of quality of life in the relationship between lifestyle and marital satisfaction.

*Hypothesis one*

The first hypothesis explored the relationship between lifestyle and quality of life. The hypothesized model predicted that lifestyle would positively and significantly impact quality of life. The results showed a positive significant path between the two constructs. β was 0.334 with *P*<0.001. As shown in Table 5, lifestyle significantly influences quality of life among employed women.

*Hypothesis 2*

Hypothesis 2 stated that quality of life would positively influence marital satisfaction. Path analysis of the initial hypothesized model revealed that quality of life had a positive, significant impact on marital satisfaction (β=0.122, *P*=0.005). This finding indicates that for employed women, the views of quality of life are important and influential on their marital satisfaction.

*Hypothesis 3*

The third hypothesis posited that there was a positive association between life style and marital satisfaction. The results revealed that lifestyle had a positive and significant influence on marital satisfaction in employed women (β=0.573, *P*<0.001). The findings revealed that lifestyle has a stronger effect on marital satisfaction of employed women.

*Hypothesis 4*

Hypothesis 4 tested the mediatory role of quality of life between lifestyle and marital satisfaction of employed women (Figure 1).
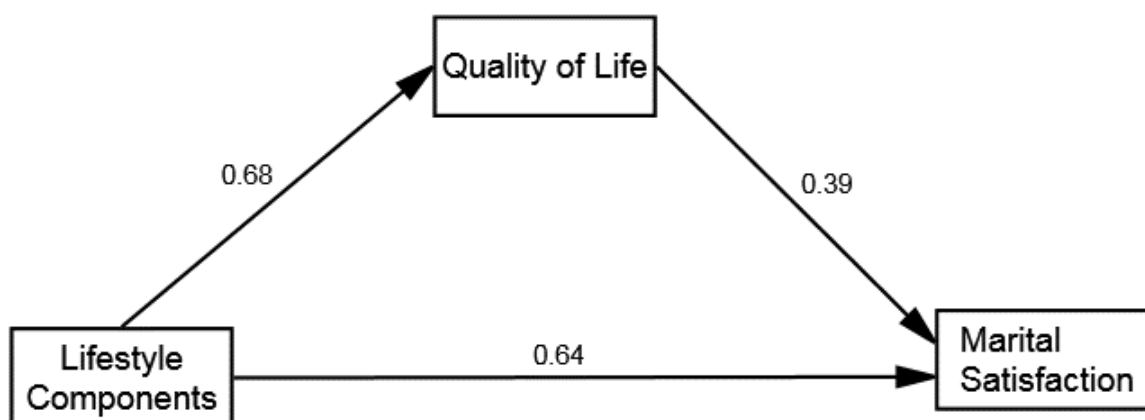


Figure 1: Mediatory Effect of Quality of Life

In the first step, the direct effect of lifestyle on marital satisfaction, previously covered in hypothesis third, was tested again. The findings showed a positive significant relationship between lifestyle and marital satisfaction (β=0.54, *P*<0.001). Next, we examined the effect of lifestyle on quality of life regarding marital satisfaction and found a significant positive relationship between these two variables (β=0.30, *P*<0.001). In the third step, we examined whether quality of life had any positive effect on marital satisfaction. The results showed that the casual path was significant and positive (β=0.54, *P*<0.001). Finally, the effect of lifestyle on marital satisfaction was tested, while quality of life was considered as mediating between them simultaneously.

The results indicated that the β value reduced from 0.54 to 0.30 while remaining significant (*P*<0.001). Therefore, the results showed a partial mediatory role for quality of life between lifestyle and marital satisfaction. Hypothesis 4 was thus supported by the data.

Table 6 illustrates the mediatory effect of quality of life between lifestyle and marital satisfaction. As this Table shows, the standardized total (direct and indirect) effect of lifestyle on marital satisfaction was 0.425, which is due to both direct (0.325) and indirect (0.100) effects of lifestyle on marital satisfaction.

## Discussion

Based on the results of the present study, quality of life had a significant relationship with all aspects of lifestyle and marital satisfaction. As argued by Gharibi (19), quality of life provides a critical link (2).

between lifestyle and marital satisfaction. Researchers have empirically investigated and described the relationships between lifestyle and marital satisfaction in different contexts (e.g., 10, 20, 21). It is clear that employed women have more than one responsibility in and out of home. These activities deplete their energy to work and can affect many aspects of their life quality.

The results of the study showed that the highest correlation coefficient was between the variables of quality of life and lifestyle, while the lowest mean was related to marital satisfaction. We found a high positive correlation between quality of life and lifestyle. This shows that employed women who scored high in lifestyle enjoyed a high quality of life, too. Ebrahimi et al. (2012) reported a significant relationship between lifestyle and quality of life in students, which is consistent with the findings of the current research. Health-promoting lifestyle is generally a predictor of quality of life, which is a recurrent finding in different studies and across different target groups (15). Also, in a study by Motamedi et al. health-promoting lifestyle was considered as the only predictor of quality of life (16). Another result of our study was the relatively high correlation between lifestyle and marital satisfaction variables, which means that the higher the level of an individual's lifestyle, the higher the satisfaction she has with regard to her marital relationship. This result was consistent with Pourmeydani et al. study regarding the relationship between lifestyle and marital satisfaction

Table 6. Lifestyle normality examination and its aspects in employed women

| Path | | Mediator | Direct Effect | Indirect Effect | Total Effect |
|---|---|---|---|---|---|
| Lifestyle | Marital Satisfaction | Quality of Life | 0.325 | 0.100 | 0.425 |

From the theoretical perspective, one of the most significant current discussions in human and family studies is the satisfaction in the life. The current study was an attempt to find and discuss the causal relationship between selected variables including lifestyle, quality of life, and marital satisfaction. Due to various reasons, including changes in family circumstances, an increasing worldwide economy and financial problems, as well as communication problems, families in general and women in particular need to have stability in their relationships (21). However, these rapid changes bring about serious effects on marital satisfaction. On the grounds of these challenges, one of the most momentous current discussions is mainly directed towards the relationship between life style and marital satisfaction, which has been the major focus of the current study. Since there are studies that have found significantly positive relationships between lifestyle and marital satisfaction, (19, 20 and 21), as previously noted, the primary purpose of the current study was to identify the effects of lifestyle on marital satisfaction and to investigate the mediatory effects of quality of life in this relationship.

From the practical viewpoint, based on the accessible research literature, activities directed towards establishing the relationship between lifestyle and marital satisfaction in Iran are tremendously rare. Therefore, the present study is urgently required to be carried out in different areas because the findings can be used to solve problems in family studies. The present study aimed to diagnose the employed women's lifestyle, quality of life, and marital satisfaction. In this regard, findings of the present study illustrated that marital satisfaction in employd women promotes their quality of life. In general, the results obtained in the current can be beneficial to the employed women in Iran.

The findings of the current study suggested that lifestyle plays a critical role in the quality of life and marital satisfaction. However, one should consider the fact that some families pay more attention to lifestyle compared with others. Regarding the importance of marital satisfaction, examining the effective factors on marital satisfaction is highly important. Hence, the goal of the present research was to investigate the relationship between lifestyle, quality of life, and marital satisfaction among employed women.

The findings of the present study are theoretically supported, as well. High level of lifestyle may result in high quality of life. According to literature (19, 21, 22, 23), high levels of lifestyle leads to a life of marital satisfaction. By modifying their lifestyle, people can amend their selfish tendencies and choose goals with high social orientation. In addition, appropriate lifestyle could increase an employed woman's understanding and thus result in increased marital satisfaction.

The findings revealed the necessity of paying attention to family variables such as lifestyle and quality of life and marital satisfaction, because family is the basic and fundamental institution of a society and it has deep effects on various aspects of social life and stability in a community.

*Conflict of interest*
Authors declare no conflict of interests.

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