

Leisure Activity Patterns and Marital Conflict in Iran

Khodabakhsh Ahmadi,^{1*} Hassan Saadat,¹ and Siena Noushad²

¹Behavioral Sciences Research Center, Baqiyatallah University of Medical Sciences, Tehran, IR Iran

²School of Medicine, Tehran University of Medical Sciences, Tehran, IR Iran

*Corresponding Author: Khodabakhsh Ahmadi, Behavioral Sciences Research Center, Baqiyatallah University of Medical Sciences, Tehran, IR Iran. Tel: +98-2188053767, Fax: +98-2188053767, E-mail: Kh_Ahmady@yahoo.com

Received 2015 January 28; Revised 2015 April 28; Accepted 2015 June 8.

Abstract

Background: Over the past few decades, the association between leisure activity patterns and marital conflict or satisfaction has been studied extensively. However, most studies to date have been limited to middle-class families of developed societies, and an investigation of the issue, from a developing country perspective like Iran, is non-existent.

Objectives: In an observational, analytical, cross-sectional study we aimed to investigate the relationship between leisure activity patterns and marital conflict in a nationally representative sample of Iranian married males.

Patients and Methods: Using the cluster sampling method, a representative sample of 400 Iranian married individuals from seven provinces of Iran was surveyed. Self-administered surveys included a checklist collecting demographic and socioeconomic characteristics of the enrolled participants, leisure time questionnaire, and marital conflict questionnaire. The main patterns of leisure activity were derived from principal component analysis. For each pattern, factor scores were calculated. The relationship between factor scores and marital conflict were assessed using multivariate linear regression models accounting for the potential confounding effects of age, education, socioeconomic status, job status, number of children, duration of marriage, and time spent for leisure.

Results: Two hundred and ninety-nine respondents completed the leisure time and marital conflict questionnaires. Five major leisure patterns were identified accounting for 60.3% of the variance in data. The most dominant pattern was family-oriented activities (e.g. spending time with family outdoors and spending time with family indoors) and was negatively linked to marital conflict (standardized beta = -0.154, P = 0.013). Of the four remaining patterns, three only included individual activities and one was a family-individual composite. Individual patterns exhibited discrepant behavior; while the pattern involving activities like 'watching TV', 'non-purposive time spending', and 'napping' was positively associated with conflict (standardized beta = 0.165, P = 0.009) and the other two were not. The mixed family-individual pattern was also positively associated with marital conflict (standardized beta = 0.240, P < 0.001).

Conclusions: Among Iranian married men, family-based leisure activities are linked to a lower level of marital conflict. The associations for individual patterns are less congruent.

Keywords: Leisure Activities, Relationship Quality, Principal Component Analyses, Cultures

1. Background

During the last few decades, the association between leisure activity patterns and marital conflict/satisfaction has been studied extensively. In one of the earliest studies, Orthner (1975), using a sample of 440 upper middle-class husbands and wives investigated whether certain leisure patterns positively influence marital satisfaction (1). It was demonstrated that marital satisfaction was positively associated with joint activities and negatively with individual activities, albeit the correlation was not evident during all of the marital periods examined (1).

Thirteen years later, Holman and Jacquart (1988) revisited Orthner's hypothesis and evaluated the role of leisure patterns on marital quality in a sample of 318 married individuals from the north central region of the United States (2). Their observations indicated that although leisure activities, with a high level of inter-spousal communication, positively affect marital satisfaction, activities

that bear little or no communication are detrimental to marital quality (3).

More recent studies have also made unique contributions to the issue. Claxton and Perry-Jenkins (2008) observed that among married couples, the amount of time dedicated to leisure activities significantly declines for both husbands and wives after the advent of children into the family (3). They also demonstrated that wives with a higher amount of joint leisure activities prenatally, described having less conflict and experienced a lower level of inter-spousal conflict (3). Collectively, these and other studies (4-7) support the notion that shared leisure activities is an important contributor to marital well-being and family as a single dynamic unit. However, evidence linking individual activities to a heightened level of conflict and diminished marital quality seem less convincing.

Surprisingly, virtually all the above-mentioned efforts have been limited to middle-class families of developed societies and to date, an investigation on the issue from a developing country perspective like Iran is non-existent. This issue is particularly relevant because ethnicity, culture, socioeconomic status, geography, and even political and religious affiliations of a country deeply impact not only leisure patterns and trends, but the dynamics of the family and the marital dyad as well (8). Indeed, complexities in behaviors and attitudes of the Iranian society toward leisure should be viewed in the context of its unique cultural, social, ecological and even political tendencies (9). The Iranian culture is heavily influenced by its religious heritage surpassingly woven with its ancient tribal traditions. Despite globalization trends over the past few decades in the country, notable differences with developed societies are still identifiable. Martin and Mason looked at some indicators of leisure activities in Iran and compared them with those of a western country, the United Kingdom (10). Based on their report, significant areas of disparity were noted. Iranians were less likely to allocate their spending money on leisure activities and preferred those activities that revolved around their families and friends (10). Moreover, they were more likely to regard religious festivities as leisure and took part in them in their free time (10). These patchy snapshots, although not complete, unveil the tip of an iceberg of difference between western and non-western notions of leisure.

2. Objectives

The present study was designed and undertaken to provide a better understanding of what constitutes leisure and how leisure activities contribute to marital quality in the context of the Iranian society. The purpose of the present study was to learn more about the following questions within the context of the Iranian society: 1) What are the major leisure activity patterns identified among married men in intact marriages?; 2) Do different leisure activity patterns relate to marital quality in men, and if so, to which direction of the relationship vectors? Throughout the text, we present and try to make sense of our findings within the framework of the individual-family antithesis. This was done because an overwhelming body of evidence in the past five decades has consistently and successfully employed this approach, confirming the usefulness of this dichotomy in understanding the impact of leisure activities on the dynamics of family relationship.

3. Patients and Methods

3.1. Patients

The present observational, analytical, cross-sectional study aimed to survey a representative sample of Iranian married men, using randomized cluster sampling method. At the initial stage, among 31 provinces of Iran, seven provinces including Tehran, the capital of Iran, were cho-

sen in order to reflect the diverse socioeconomic profile of the country. These seven provinces were: Tehran, Sistan-Baluchestan, Khuzestan, Esfahan, Mazandaran, Ardebil and Kurdistan. Next, with the exception of Tehran, to which two clusters were allocated, one cluster was assigned to each province. In each province, the range of postal codes in urban areas was collected and one code was randomly picked using a randomization software. The corresponding household was visited the next day, and the survey package was delivered to the residents. A brief introduction to the research and the included survey questionnaires were provided by the research crew and upon agreement of the respondent to participate, plans were made to collect the completed forms the next day or at the earliest convenient time for the respondent. After delivering the first package to a randomly chosen household, neighboring households in the same urban district were approached and similar packages were delivered. This procedure was iterated until 50 sets of survey questionnaires were successfully delivered. Households were excluded if the primary resident of the house declined to participate, was not married at the time, was under 18 years of age, had been divorced, widowed, or separated. Between February and May 2011, the research crew delivered a total of 400 packages, of which 322 were completed with signed agreements and returned by the respondent, indicating a response rate of 80.5%.

The survey packages contained an introductory page describing the purpose and nature of the study, followed by general and questionnaire-specific guidelines providing the respondent with instructions on how to fill in the forms and questions. A written informed consent form was also included, and the returned forms were included in the final analysis if the accompanying consent form was read and signed by the respondent. The ethics committee of the behavioral sciences research center of Baqiyatallah University of Medical Sciences also reviewed and approved the study protocol.

3.2. Measurements

For the purpose of the present study, we adopted three self-administered questionnaires and included a standard checklist, the leisure time questionnaire, and the marital conflict questionnaire (MCQ).

3.2.1. Standard Checklist

The standard checklist included items that inquired about age, gender, the highest level of education achieved, self-rated socioeconomic status, job (retired/not retired), marriage (duration of marriage and age when married), number of children, and time spent inside the house not working or sleeping.

3.2.2. Leisure Activity Questionnaire

The leisure time questionnaire is a 14-item, self-administered instrument that collects information about the main themes of leisure activities. For each item, the re-

spondent is asked to rate the amount of time spent on a certain activity using a five-point Likert type scale that ranges from very frequently, to frequently, occasionally, rarely, to very rarely/never. The 14 items of the instrument are presented in Table 1. To develop the leisure time questionnaire, a random group of 50 married men were surveyed and were asked the following open-ended question: 'In your time inside the house, when not working and not sleeping, what do you do? Try to think about the past two weeks and list as many items as you can remember.' The answers were then reviewed and categorized by the research team, ultimately forming the final key themes of the instrument (Appendix 1).

3.2.3. Marital Conflict Questionnaire

Developed by Barati-Bagherabad (1996) in the Persian language, the marital conflict questionnaire is a 42-item, self-administered instrument that aims to inquire about various areas of marital discord and distress. The MCQ is specifically tailored and directed for application for the Iranian culture. Given the strong collectivist background of the Iranian society and the significant role of extended family in the married life of an individual, special emphasis is placed to inquire about couples' relationships with their in-laws and other members of the extended family. The forty-two items of the questionnaire are answered on a five-point Likert-type scale ranging from 'always' to 'never', which revolve around the following seven themes: decreased cooperation, decreased sexual relations, heightened reactions toward spouse, increased competitiveness in gaining support of the children, increased relationship with one's own extended family, decreased relationship with spouse's extended family and separation of financial affairs. The obtained scores on each of the seven domains are then summed up to form a final score that ranges from a minimum of 42 to a maximum of 220. The larger the total score, a higher level of conflict is observed. The instrument was initially developed on a sample of 111 cases and 108 controls. Cases were drawn among married couples visiting a marriage counseling clinic, and controls were randomly selected from the community matched for age, gender and level of education. Mean and standard deviation (SD) for the MCQ in the case and control groups were 105.06 ± 21.28 and 85.18 ± 11.77 , respectively (11).

3.3. Statistical Analysis

All statistical analyses were performed using the statistical package for the social sciences (SPSS) version 20 for Windows® (IBM corporation, New York, United States). Continuous variables are presented as mean \pm SD and categorical variables are described as proportions. To determine the degree of association of individual items of the leisure time questionnaire with the MCQ score, zero-order correlations were run and the Pearson product-moment correlation coefficient was calcu-

lated. Principal component analysis (PCA) was used to extract frequent leisure patterns from the leisure time questionnaire. To allow for easier interpretability of the factor loadings, factors underwent an orthogonal (Varimax) rotation. Only factors explaining a large portion of data variance were retained. The eigenvalue cut-off for retaining the extracted factors was chosen as the point of first break in the Scree plot. For the retained factors, a regression score was calculated. For each factor, a factor score was then calculated. Factor scores were then classified into four equal groups (quartiles); individuals in the fourth quartile were the most adherent to that pattern whereas individuals in the first quartile were the least likely to follow the leisure pattern specified. To assess the relationship between factor scores and marital conflict uni- and multivariate linear regression models were constructed. In univariate models, the MCQ score and factor score quartiles were entered in the model as dependent and independent variables, respectively. Using a forward step-by-step procedure, possible confounding variables were introduced into the model and the confounding variables were adjusted. In all tests, a P value of < 0.05 was considered necessary to reject the null hypothesis.

4. Results

4.1. Baseline Characteristics

Of the 322 sets of received questionnaires, 299 were complete and thus were included in the final analysis. Baseline characteristics of men of our study are presented in Table 1. The youngest and the oldest respondents were 23 and 63 years old, respectively. The majority of enrolled participants (86.3%) were still in the workforce. All participants were in intact marriages, had been married for an average of 17 years (range 2 - 38 years), and except for one individual, had at least one child. Subtracting sleep time, participants spent an average of 6.5 hours per day in the house available to them for doing leisure activities (ranging from a minimum of one to a maximum of 19 hours).

4.2. Zero-Order Correlations

The results of zero-order correlations between each item of the leisure activity questionnaire and MCQ score are summarized in Table 2. Significant and positive correlations with marital conflict were found for 'going out and spending time with friends', 'navigating on the internet, spending time on a computer', 'non-purposive time spending', and 'relaxing, napping, daydreaming'. Moreover, the following items were significantly and negatively correlated with the MCQ score: 'exercising religious practices' and 'spending time with family outdoors'. A negative correlation between 'reading' and MCQ score was also observed, however, it did not reach statistical significance (Table 2).

4.3. Leisure Activity Patterns

Using the dimension reduction procedure of PCA and based on the eigenvalue cut-off in the screen plot, a total of five sui generis leisure patterns were identified, collectively accounting for 60.3% of the variance in data (Table 3). The most dominant pattern, pattern A, which accounted for 21.1% of the variance explained, featured all four family-centered items. 'Watching TV' and 'exercising religious practices' were also loaded weakly on this pattern. The second pattern, pattern B, was principally characterized by 'exercising religious practices', 'engaging in social activities', and 'doing left over work from office/job'. Of note, 'non-purposive time spending' was loaded on this pattern. Pattern C featured a combination of individual and family-based activities, which included 'doing exercise, working out, playing sports' and 'going out and spending time with friends' on the individual end of the spectrum, and 'spending time with family indoors' and 'attending to, or throwing family parties' on the family end. The other two patterns, patterns D and E, exclusively consisted of leisure activities that are primarily done individually. Pattern D was mainly characterized by 'navigating on the internet, spending time on a computer'

and also 'reading' whereas the items loading heavily on pattern E were 'relaxing, napping, daydreaming', and 'watching TV'.

4.4. Multivariate Regression Analysis

To investigate the association between leisure activity patterns and marital conflict, composite factor scores were calculated and were used as an independent predictor in the univariate and multivariate linear regression models. The findings from the regression analysis are summarized in Table 4. Pattern A was significantly yet negatively associated with marital conflict in both uni- and multivariate models. On the other hand, patterns C and E significantly predicted marital conflict in our sample of married men, with pattern C yielding larger regression coefficients than pattern E (standardized beta = 0.240 vs. 0.165 in the multivariate models). Patterns B and D were not associated with marital conflict. Of note, although variables included in the multivariate model tended to dilute the observed associations between leisure activity patterns and MCQ scores, they did not significantly confound the relationship, indicating their limited influence on the overall fit of the model.

Table 1. Baseline Characteristics of the Survey Respondents^{a,b}

Variables	Values
Age, y	41.9 ± 7.8
Age when married, y	25.0 ± 4.0
Duration of marriage, y	17.0 ± 8.2
Average time spent in the house on a typical day, h	6.5 ± 3.2
Education	
Elementary school	4 (1.3)
Middle school	24 (8.0)
High school	8 (2.7)
Diploma	86 (28.8)
College or bachelor's degree	144 (48.2)
Master's degree or higher	33 (11.0)
Socio-economic status	
Low	19 (6.4)
Middle	186 (62.2)
High	94 (31.4)
Job	
Working	258 (86.3)
Retired/unemployed	41 (13.7)
Number of children	
0	1 (0.3)
1	84 (28.1)
2	97 (32.4)
3	69 (23.1)
4	31 (10.4)
> 5	17 (5.7)

^aTotal number of respondents is 299.

^bValues are expressed as mean ± SD or No. (%).

Table 2. Zero-Order Correlation of Individual and Family Leisure Activities With Marital Conflict^a

Individual Activities	Mean ± SD	Zero-Order Correlation With Marital Conflict	
		r	P
Doing exercise, working out, playing sports	2.21 ± 0.86	-0.018	0.750
Going out and spending time with friends	2.12 ± 1.10	0.331	< 0.001
Exercising religious practices	3.21 ± 1.10	-0.129	0.026
Engaging in social activities	3.02 ± 0.98	-0.097	0.096
Doing leftover work from office/job	2.86 ± 0.96	0.057	0.329
Navigating on the internet, spending time on a computer	2.20 ± 1.32	0.157	0.007
Non-purposive time spending	2.16 ± 1.08	0.176	0.002
Watching TV	2.81 ± 1.05	0.078	0.179
Relaxing, napping, daydreaming	2.92 ± 0.84	0.173	0.003
Reading	2.70 ± 1.18	-0.109	0.062
Family activities			
Spending time with family outdoors	3.83 ± 0.87	-0.178	0.002
Spending time with family indoors	3.16 ± 0.94	0.008	0.896
Attending to, or throwing family parties	2.92 ± 0.87	0.098	0.088
Doing house chores or helping other family members with them	3.62 ± 0.88	-0.094	0.103

^aEach item was ranked on a five-point Likert-type scale ranging from 1 = very rarely/never to 5 = very frequently.

Table 3. Leisure Activity Patterns and Their Features, Identified Using Principal Component Analysis

Individual Activities	Factor Loadings ^a				
	Pattern A	Pattern B	Pattern C	Pattern D	Pattern E
Doing exercise, working out, playing sports	NA	NA	0.615	0.434	NA
Going out and spending time with friends	NA	NA	0.774	NA	NA
Exercising religious practices	0.322	0.735	NA	NA	NA
Engaging in social activities	NA	0.682	NA	0.386	NA
Doing leftover work from office/job	NA	0.659	NA	NA	NA
Navigating on the internet, spending time on a computer	NA	NA	NA	0.792	NA
Non-purposive time spending	NA	-0.444	NA	NA	0.461
Watching TV	0.367	NA	NA	NA	0.684
Relaxing, napping, daydreaming	NA	NA	NA	NA	0.790
Reading	NA	NA	NA	0.767	NA
Family activities	NA	NA	NA	NA	NA
Spending time with family outdoors	0.779	NA	NA	NA	NA
Spending time with family indoors	0.716	NA	0.459	NA	NA
Attending to, or throwing family parties	0.439	NA	0.605	NA	NA
Doing house chores or helping other family members with them	0.615	NA	NA	NA	NA
Variance explained, %	21.13	12.17	11.13	8.50	7.33

^aFactor loadings < 0.30 are not listed for brevity.

Table 4. Multivariate Linear Regression Analysis for the Association of Leisure Activity Patterns With Marital Conflict^a

	t	Standardized Beta	P Value
Pattern A			
Univariate model	-2.722	-0.161	0.007
Multivariate model	-2.515	-0.154	0.013
Pattern B			
Univariate model	-0.417	-0.085	0.158
Multivariate model	-0.497	-0.032	0.620
Pattern C			
Univariate model	4.646	0.269	< 0.001
Multivariate model	3.836	0.240	< 0.001
Pattern D			
Univariate model	-0.615	-0.037	0.539
Multivariate model	-0.096	-0.007	0.924
Pattern E			
Univariate model	3.095	0.183	0.002
Multivariate model	2.650	0.165	0.009

^aMultivariate models adjusted for age, level of education, socioeconomic status, job status, number of children, duration of marriage and daily available time for leisure.

5. Discussion

In the present study on Iranian married men, five distinctive patterns of leisure activity seemed to stand out. Of the five recognized patterns, one was dominated by family-centered activities, three were primarily characterized by individual activities and one composed of both types.

The developed questionnaire, which was based upon a preliminary survey of married male respondents was unproportionally weighted towards individual and not family-centered items (ten items versus four items). This finding was substantiated by the fact that out of five primary leisure patterns, three were exclusively built upon individual-based items and together accounted for a cumulative variance of 28.0%, notably larger than the amount of variance explained by the dominant pattern A (21.1%). Therefore, it might be argued that among Iranian married men, although the most common activity pattern is a family-based one, various individual dominant patterns also tend to exist even exceeding the first pattern in terms of frequency. However, the question is, why in a developing society like Iran that is traditionally regarded as collectivist with strong family values, do such individualistic attributes emerge? The findings from the global leadership and organizational behaviour effectiveness (GLOBE) offer some insights into the matter (9). In the GLOBE study, participants from Iran ranked very high, way above the median, in the domain of 'in-group collectivism', which is indicative of cohesiveness, attachment, and loyalty of an individual to the groups that he or she belongs to, including and above all 'family' (9). That being said, participants also exhibited strong

individualistic predilections indicated by low scores on societal collectivism and being participative, and a high score on competitiveness, and being self-protective (9). All in all, it appears that the Iranian culture is a rather complex entity that entails both elements of collectivism as well as individualism and single terms such as 'collectivist' to label an intricate system of interwoven beliefs and values might be too simplistic and even misleading.

In our study, pattern A, which featured family-centered leisure activities was negatively associated with marital conflict. This is in concert with previous studies that have suggested shared leisure activities and activities with a high level of communication between spouses and children are beneficial for the marriage (1-3, 12). Our observations with regards to patterns lead by individual activities were not congruent; pattern E was positively associated with marital conflict and patterns B and D were not associated with MCQ scores in both uni- and multivariate regression analyses. Of note, Pattern C, which included elements of both types of leisure, was also positively associated with marital conflict. These discrepant findings highlight the fact that individual leisure activities cover a wide range of practices and leisure time spending ways that cannot simply be put under a broad umbrella term. Therefore, although family-based activities might be positively linked to lower marital conflict through engaging the couple and also children in shared experiences, a more intricate explanation might be needed to describe the relationship between individual activities and marital conflict.

A number of studies to date have suggested that religiosity and adherence to religious beliefs have a positive influence on marriage by decreasing divorce rate, increasing marital quality, reinforcing adjustment and commitment, and lowering the level of marital conflict (13-15). Agate et al. (2007) demonstrated that family religiosity is the strongest predictor of family functioning in a sample of 121 parents adherent of the Judeo-Christian religions (16). Similar observations as to previous studies of Christian faith were replicated in our sample of married men, where the entirety of the enrolled population described their religion as 'Muslim'. In zero-order correlations, 'exercising religious practices' produced the largest negative correlation coefficient as compared with other individual leisure activities. This item, also loaded strongly on leisure pattern B, and despite having no elements of family leisure, this pattern was not associated with marital conflict. Additionally, 'exercising religious practices' also weakly loaded on Pattern A, which was associated with a lower level of conflict. Therefore, we postulate here, that the positive effects of religiosity on the family might have negated the possible detrimental influences of other individual activities and the lack of family activities in the pattern, so that the balanced pattern score was not associated with marital conflict.

In our regression analysis, we adjusted for a number of variables that were assumed to confound, dilute or strengthen, the observed relationship between leisure and marital conflict. Previous research has shown that following the advent of children and transition to parenthood, marital conflict increases and leisure time decreases possibly owing to the tremendous amount of time and energy that caring for children requires (3, 17, 18). It has also been suggested that marital quality declines over the marital career although the trajectory is not entirely linear (19-21). Other variables including age, level of education, perceived level of socioeconomic status, job status, and the total amount of time available for leisure might influence the type and pattern of leisure, marital discord, and the relationship between the two directly or indirectly. Indeed, although in all models inclusion of the abovementioned variables tended to temper the association between leisure score and MCQ score, they did not significantly alter it, suggesting that the connection is not dependent upon the variables that were subsequently entered into the regression model.

A number of limitations in the design and conduct of the present study should be considered. First, studies in the field of marriage and family need to include both husbands and wives and investigate the proposed hypotheses at both individual and dyad levels. We acknowledge that there are multiple considerations at the dyad level that influence both sides of the equation; leisure activity and marital conflict. Second, we recognize that our semi-quantitative 14-item leisure activity questionnaire might have not been able to capture the true heterogeneity and distinctiveness of the spectrum of leisure activities en-

joyed by the participants. Ideally, the study should have taken advantage of a leisure activity journal with respondents entering the type and duration of their leisure activities over a pre-determined period of time. This approach would have provided us with a more factual portrait of what is going on when men are not working and not sleeping. Given the epidemiologic nature of our study, such extensive inquiry was not practically feasible and it remains on the shoulders of leisure scientists in the future. Last, but not least, the cross-sectional nature of our study precludes any inferences of causality or directionality to be drawn.

Our study unveiled novel findings regarding qualitative and qualitative description of leisure activities in Iran, a unique developing country. Leisure patterns in Iran are complex and involve a wide range of activities that can be done individually or carried out in a family setting. In an exploration of the association between leisure patterns and marital conflict, we demonstrated that patterns, which involve other members of the family, and not only the individual himself are associated with a lower level of marital conflict, a finding that is in general agreement with the body of the research conducted among middle-class Caucasian couples from developed nations.

On the other hand, the relationship between individual-based leisure patterns and marital conflict tends to be less homogeneous; it may be positive, negative, or non-significant. The association appears to be a function of the type of activity, as well as its assemblage with other activities to form a pattern. Studies evaluating leisure activities in Iran are virtually non-existent and our study provides a preliminary framework for researchers in the field of leisure studies in this regard. Whether the identified patterns and associations observed herein are idiosyncratic and specific to the society and culture of Iran or whether analogous patterns can be determined in western cultures remains to be elucidated using carefully designed representative cross-cultural studies.

Acknowledgments

The authors would like to thank all the research crew and staff who participated in the conduct of the present survey.

Footnotes

Authors' Contribution: Study concept and design: Khodabakhsh Ahmadi; acquisition of data: Khodabakhsh Ahmadi and Hassan Saadat; analysis and interpretation of data: Siena Noushad; drafting of the manuscript: Siena Noushad and Hassan Saadat; critical revision of the manuscript for important intellectual content: Khodabakhsh Ahmadi and Hassan Saadat; statistical analysis: Siena Noushad; administrative, technical, and material support: Siena Noushad and Hassan Saadat; study supervision: Khodabakhsh Ahmadi.

Funding/Support: This study was funded by the behavioral sciences research center of Baqiyatallah University of Medical Sciences.

Appendices

Please visit article's online version for appendices.

References

1. Orthner DK. Leisure Activity Patterns and Marital Satisfaction over the Marital Career. *J Marriage Fam.* 1975;**37**(1):91-102. doi: 10.2307/351033.
2. Holman TB, Jacquart M. Leisure-activity patterns and marital satisfaction: A further test. *J Marriage Fam.* 1988:69-77.
3. Claxton A, Perry-Jenkins M. No Fun Anymore: Leisure and Marital Quality Across the Transition to Parenthood. *J Marriage Fam.* 2008;**70**(1):28-43. [PubMed: 20224746]
4. Huff C, Widmer M, McCoy K, Hill B. The influence of challenging outdoor recreation on parent-adolescent communication. *Ther Recreation J.* 2003;**37**(1):18-37.
5. Sara Wells M, Widmer MA, Kelly McCoy J. Grubs and Grasshoppers: Challenge-Based Recreation and the Collective Efficacy of Families with At-Risk Youth*. *Fam Relat.* 2004;**53**(3):326-33. doi: 10.1111/j.0197-6664.2003.0009.x.
6. Smith KM, Freeman PA, Zabriskie RB. An Examination of Family Communication Within the Core and Balance Model of Family Leisure Functioning. *Fam Relat.* 2009;**58**(1):79-90. doi: 10.1111/j.1741-3729.2008.00536.x.
7. Marks SR, Huston TL, Johnson EM, MacDermid SM. Role Balance Among White Married Couples. *J Marriage Fam.* 2001;**63**(4):1083-98. doi: 10.1111/j.1741-3737.2001.01083.x.
8. Iwasaki Y, Nishino H, Onda T, Bowling C. Research Reflections Leisure Research in a Global World: Time to Reverse the Western Domination in Leisure Research? *Leisure Sci.* 2007;**29**(1):113-7. doi: 10.1080/01490400600983453.
9. Javidan M, Dastmalchian A. Culture and leadership in Iran: The land of individual achievers, strong family ties, and powerful elite. *The Academy of Management Executive.* 2003;**17**(4):127-42.
10. Martin WH, Mason S. Leisure in three Middle Eastern countries. *World Leisure J.* 2003;**45**(1):35-44. doi: 10.1080/04419057.2003.9674303.
11. Barati Bagherabad T. (1996) *Effects of marital conflict on husband and wife interrelationship (Master's Thesis)*. Retrieved from: Sanai B AS, Falahati, Sh, Houman A. *Family and Marriage Scales*. [In Persian]. Besat Publications: 2009.
12. Shaw SM, Dawson D. Purposeful Leisure: Examining Parental Discourses on Family Activities. *Leisure Sci.* 2001;**23**(4):217-31. doi: 10.1080/01490400152809098.
13. Sherkat DE, Ellison CG. Recent developments and current controversies in the sociology of religion. *Annu Rev Sociol.* 1999:363-94.
14. Mahoney A, Pargament KI, Tarakeshwar N, Swank AB. Religion in the home in the 1980s and 1990s: a meta-analytic review and conceptual analysis of links between religion, marriage, and parenting. *J fam psychol : JFP : journal of the Division of Family Psychology of the American Psychological Association (Division 43)*. 2001;**15**(4):559-96. doi: 10.1037/0893-3200.15.4.559.
15. Mahoney A, Pargament KI, Jewell T, Swank AB, Scott E, Emery E, et al. Marriage and the spiritual realm: The role of proximal and distal religious constructs in marital functioning. *J fam psychol.* 1999;**13**(3):321. doi: 10.1037/0893-3200.13.3.321.
16. Agate ST, Zabriskie RB, Eggett DL. Praying, Playing, and Successful Families. *Marriage Fam Rev.* 2007;**42**(2):51-75. doi: 10.1300/J002v42n02_04.
17. Twenge JM, Campbell WK, Foster CA. Parenthood and Marital Satisfaction: A Meta-Analytic Review. *J Marriage Fam.* 2003;**65**(3):574-83. doi: 10.1111/j.1741-3737.2003.00574.x.
18. Lawrence E, Rothman AD, Cobb RJ, Rothman MT, Bradbury TN. Marital satisfaction across the transition to parenthood. *J Fam Psychol.* 2008;**22**(1):41-50. doi: 10.1037/0893-3200.22.1.41. [PubMed: 18266531]
19. Vaillant CO, Vaillant GE. Is the U-Curve of Marital Satisfaction an Illusion? A 40-Year Study of Marriage. *J Marriage Fam.* 1993;**55**(1):230-9. doi: 10.2307/352971.
20. Glenn ND. The course of marital success and failure in five American 10-year marriage cohorts. *J Marriage Fam.* 1998:569-76.
21. VanLaningham J, Johnson DR, Amato P. Marital happiness, marital duration, and the U-shaped curve: Evidence from a five-wave panel study. *Soc Forces.* 2001;**79**(4):1313-41. doi: 10.1353/sof.2001.0055.