

# Effect of shift work on marital

## satisfaction of employees of Jiroft University of Medical Sciences in 2018

*Efecto del trabajo por turnos en la satisfacción matrimonial de los empleados de la Universidad de Ciencias Médicas de Jiroft en 2018*

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### Abstract

Marital satisfaction is one of the most important factors in life satisfaction and family functioning which also influences the work success and social relations of individuals. The evidence indicates that job issues and their conditions can affect marital satisfaction. The purpose of this research was to assess the marital satisfaction status of personnel working in Jiroft University of Medical Sciences; we seek to compare two groups of personnel working in daily shifts and those with different shifts. This was a descriptive-analytical cross-sectional study conducted in 2018. The population consisted of employees of Jiroft University of Medical Sciences. We selected 165 persons using stratified random sampling. Inclusion criteria were marriage, monogamy, living with a spouse, and being an employee of Jiroft University of Medical Sciences. After obtaining the participants' consent, the Enrich 47-item questionnaire for measuring marital satisfaction was given to the participants. Data were analyzed by the Student t-test, using SPSS23 software. The marital satisfaction of the employees of Jiroft University of Medical Sciences (31% male and 69% female) was  $160.94 \pm 33.80$ . Results showed that marital satisfaction in morning shift employees was significantly higher than those of rotating shift work ( $p = 0.001$ ). However, the results of marital satisfaction in terms of gender and type of work showed that work shift affects only marital satisfaction of women ( $p = 0.004$ ) and health care employees ( $p = 0.005$ ). Considering the findings and the importance of shift work variable for marital satisfaction, to maintain family life and increase productivity in the organization, health care workers and women, in particular, need more attention and services.

**Keywords:** Marital satisfaction, rotating shift work, employees

### Resumen

La satisfacción conyugal es uno de los factores más importantes en la satisfacción de la vida y el funcionamiento familiar, que también influye en el éxito laboral y las relaciones sociales de las personas. La evidencia indica que los problemas laborales y sus condiciones pueden afectar la satisfacción marital. El propósito de esta investigación fue evaluar el estado de satisfacción conyugal del personal que trabaja en la Universidad de Ciencias Médicas de Jiroft; buscamos comparar dos grupos de personal que trabaja en turnos diarios y aquellos con turnos diferentes. Este fue un estudio descriptivo analítico transversal realizado en el 2018. Su población estuvo conformada por empleados de la Universidad de Ciencias Médicas de Jiroft. Seleccionamos 165 personas mediante muestreo aleatorio estratificado. Los criterios de inclusión fueron matrimonio, monogamia, vivir con un cónyuge y ser empleado de la Universidad de Ciencias Médicas de Jiroft. Después de obtener el consentimiento de los participantes, se entregó a los participantes el cuestionario Enrich de 47 ítems para medir la satisfacción conyugal. Los datos fueron analizados mediante la prueba t de Student, utilizando el software SPSS23. La satisfacción conyugal de los empleados de la Universidad de Ciencias Médicas de Jiroft (31% hombres y 69% mujeres) fue  $160,94 \pm 33,80$ . Los resultados mostraron que la satisfacción conyugal fue significativamente mayor en los empleados del turno de mañana que en los del turno rotativo ( $p = 0,001$ ). Sin embargo, los resultados de la satisfacción conyugal en términos de género y tipo de trabajo mostraron que el turno de trabajo tiene efecto solo sobre la satisfacción conyugal de las mujeres ( $p = 0,004$ ) y los trabajadores de la salud ( $p = 0,005$ ). Considerando los hallazgos y la importancia de la variable del trabajo por turnos para la satisfacción conyugal, con el fin de mantener la vida

familiar y aumentar la productividad en la organización, los trabajadores de salud y las mujeres en particular necesitan más atención y servicios.

**Palabras clave:** Satisfacción marital, Trabajo por turnos rotativos, Empleados

## Introduction

To establish and maintain sincere and friendly relationships, couples are faced with severe and pervasive problems in today's society. Marital distress is a problem that has caused the referring of the help-seekers to the psychological health centers more than any other psychiatric diagnosis<sup>1</sup>. The existent evidence indicates a daily increase in the statistics related to divorce, marital discrepancies, and loosening of the family foundations<sup>2</sup>. The data related to divorce in the country shows that the divorce rate in Iran has been 4.2 in 2015 meaning that a divorce has been registered per every 4.2 marriages. Solidarity and persistence of the family depends on sustainable marriage and satisfaction of marriage and marital life meaning that any looseness and shakiness in marital satisfaction and/or the absence of successful marriage disorders the mental and psychological tranquility of the couples and additionally exposes the family's survival and persistence to risk<sup>3</sup>

Marital satisfaction can be realized as the objective feeling of consent, satisfaction, and pleasure experienced by the husbands and wives when all the marriage's aspects are taken into account. Marital satisfaction is the match between the expected situation and the *status quo* of the marital relationships and it is a positive and pleasurable attitude husbands and wives have towards the various aspects of their marital relations<sup>4</sup>. Marital satisfaction is one of the important factors of satisfaction with family life and performance and it is also effective in the successfulness of the job and social relations. Healthy marital relations are usually the first source of the couples' social support and they can act as a protective factor against physical and psychological diseases<sup>5</sup>. The opposite form of the problem also holds in such a way that the dissatisfactory marital relations can cause stress and make individuals get inflicted with psychological diseases. For example, in many of the studies performed in Iran, among them the ones of Noorbala et al.<sup>6</sup> and Azar A'ain et al.<sup>7</sup>, in Jiroft, the single persons (who have never married) enjoy better psychological health and the married, divorced, and widowed persons have been found with lower psychological health. These results are quite opposite to what is found globally<sup>7</sup>. It appears that the stresses related to the married life and dissatisfaction of the common life are effective under such conditions. Amongst the factors influencing the marital satisfaction in the individuals, the personality characteristics, communications, conflict-resolution skills, job, and financial management, leisure time activities, sexual relationships, parenthood styles (child upbringing), religious beliefs, and parity-seeking roles (equality of women and men) can be pointed out<sup>8,9</sup>.

Based on the studies, one of the factors that can influence marital satisfaction is the problems related to the job and its quality. Disregarding the financial supply and meeting of some of the essential needs like psychological and physical motility, social contact, emotions, and sense of self-valuableness, trust, and competency, a job can be a substantial source of psychological pressure. A satisfactory job may turn into a source of dissatisfaction over time and navigate the individual towards job burn-out<sup>10</sup>. Although job-related stresses are not necessarily related to the reduction in marital satisfaction and factors like the amount of interest in job and parenthood<sup>11</sup> are effective in this regard, the job conditions are probably some effective factors in the effect of job on marital satisfaction. For instance, some studies demonstrate that the periodical performing of jobs in a turn-taking manner brings about reductions in contacts and increases in the conditions leading to divorce<sup>12</sup>. Nursing is amongst the jobs performed periodically in turns. In some of the researches, marital satisfaction of the nurses has been found significantly lower than the others<sup>13</sup>. There is this possibility that the problems resulting from the periodical and overnight shift jobs and the conflicts between the job and the familial roles cause the augmentation of the tensions and reduction of the marital satisfaction<sup>14</sup>. This is while some of the studies have found different results. In effect, Khalili et al.<sup>15</sup> in their research of the marital satisfaction and factors related thereto in the female nurses in the city of Khalkhal, demonstrated that the nurses enjoyed high marital satisfaction and felt good about their common life and marital relations.

The perception of the factors related to couples' marital satisfaction can help them improve their relations and elevate the success chances of their marriages<sup>16</sup>. This issue is of greater importance in couples. Moreover, awareness of the occupational factors related to marital satisfaction can help employers contribute to the improvement of marital satisfaction and enhancement of the workforce's productivity by considering the vocational factors. Considering the probable effects of job and occupational conditions, including job turns, on the marital satisfaction rate in the individuals and the paradoxical results in this regard, the present study aims to assesses the marital satisfaction status of the personnel working in Jiroft's Medical Sciences University and its comparison between two groups of the personnel working in the ordinary daytime hours and the personnel working in various job shifts.

## Materials and Methods

The present study is descriptive-analytical research and it has been carried out in a cross-sectional form in 2018. The study population included all the staff members of Jiroft's Medical Sciences University, including the headquarter and treatment staff. 165 individuals were selected based on random clustering between the headquarter and treatment personnel. To determine the study sample volume, the results of the study by Molaei were utilized<sup>17</sup>. This way, to obtain the largest sample volume, use was made of the weakest relationship between

the lifestyle indicators and the marital satisfaction rate. Furthermore, the first type error rate was set at 0.05 and an 80% test power was considered. Using the following formula, the study sample volume was obtained equal to 140 individuals.

$$n = \left( \frac{1.96 + 0.85}{0.24} \right)^2 + 3 = 140$$

Considering the drop likelihood, 190 questionnaires were distributed in a cluster-based random manner in proportion to the population of the headquarter and healthcare-treatment personnel, and 165 questionnaires were collected with 39 of them being completed by the administrative staff and 126 of them being completed by the treatment personnel.

The inclusion criteria were being married, living with a spouse, and working in Jiroft's medical sciences university. The exclusion criteria, as well, were polygamous life and unwillingness for continuing participation in the research. After selecting the samples, the goals were orally explained to the participants, and the ENRICH questionnaire was administered to them in case they express consent. To protect the privacy of the staff, the questionnaires were coded anonymously and the participants were asked to put the completed questionnaires into boxes placed in their work sectors. The criterion of the individuals' consent for taking part in the project was the completion and returning of the questionnaire as well as signing the consent letter attached to the questionnaire.

The collected information was subjected to a Student t-test and analyzed using SPSS23 software. The significance level of all the tests was set at 5%.

*Instrument:* The instrument used for extracting information from the questionnaires included two parts: the first part included demographic questions (age, gender, education, employment type, job, number of children, job shift, and job type), and the second part was comprised of administering ENRICH marital satisfaction scale that contains 47 items; the questionnaire has been designed by Olson in 1993<sup>18</sup>. This questionnaire has been used as an important and authentic research instrument in numerous investigations for measuring marital satisfaction and it incorporates 12 scales, conventional response, marital satisfaction, personality issues, marital relations, conflict resolution, and financial supervision, activities related to leisure time, sexual relations, child care, relatives and friends issues, parity-seeking roles and religious orientation. The content validity of the questionnaire has been confirmed in Iran by Solymanian et al. and its reliability has been obtained equal to 0.93 based on Cronbach's alpha method<sup>19</sup>. The answers to the questions are provided in the form of five choices (completely agree, agree, neither agree nor disagree, disagree, and completely disagree). In this questionnaire, each of the items is scored with a value ranging from one to five, and the scores are finally summed. The scores between 47 and 84 indicate severe dissatisfaction, scores between 85 and 122 indicate relative dissatisfaction; scores between 124 and 160 indicate intermediate satisfaction; scores between 161 and 198 indicate high satisfaction, and scores between 199 and 235 indicate very high satisfaction.

## Results

Table1 presents the demographic specifications of the participants.

Table 1. Demographic specifications of the study participants

Variable	Number	Percentage	Variable	Number	Percentage		
Gender	Male	122	73.94	Employment type	Permanent	35	21.21
	Female	43	26.06		Project-based	36	21.82
Education	Below diploma	2	1.21		Formal	68	41.21
	Diploma	25	15.15		Corporate-based	10	6.06
	Associate's degree	10	6.06	Project-based	16	9.70	
	BA	109	66.06	Number of children	Zero	24	14.54
	MA	15	9.09		One	53	32.12
	PhD	4	2.42		Two	55	33.33
Job type	Administrative	39	23.64		Three	24	14.54
	Treatment	126	76.36		Four	6	3.64
Work shift	Morning shift	54	32.73		Five and more	3	1.82
	Rotational	111	67.27				

The average age of the study participants was 36.43 (with a standard deviation of 8.7). Moreover, the average service period was 13.42 years (with a standard deviation of 9.08) and the average marriage term was 12.27 years (with a standard de-

viation of 8.70). The mean marital satisfaction of the study participants was found equal to 160.94 (with a standard deviation of 33.80) which are in a range from 72 to 223. Table 2 shows the marital satisfaction of the employees at various levels.

**Table 2. Staff's marital satisfaction rate at various levels**

Marital satisfaction rate	Frequency	Percentage
Severe dissatisfaction	4	2.42
Relative dissatisfaction	20	12.12
Intermediate satisfaction	50	30.30
High satisfaction	69	41.82
Very high satisfaction	22	13.33
Sum	165	100

Based on the results given in Table 2, the employees of Jiroft's Medical Sciences University were mostly in a range from intermediate to high in terms of marital satisfaction. (Table 3) shows the mean aspects of marital satisfaction.

**Table 3. The mean aspects of marital satisfaction**

Marital satisfaction's dimensions	Mean	Standard deviation
Conventional response	11.18	3.24
Marital satisfaction	24.11	6.46
Personality issues	10.52	3.56
Communication	10.20	3.46
Conflict resolution	16.54	4.92
Financial management	10.49	3.10
Leisure time activities	12.16	2.27
Sexual relations	11.71	2.39
Child care	13.32	3.76
Friends and relatives	13.46	3.43
Roles related to men-women equality	7.49	2.10
Religious orientation	15.11	3.98

As it is shown in the results of Table 3, the highest marital satisfaction is in the conflict-resolution dimension and the lowest marital satisfaction is in the dimension related to the men-women parity roles.

To compare the participants' sexual satisfaction based on job shifts and turns, gender, and work type, use was made of t-test the results of which have been summarized in Table 4.

**Table 4. The mean and standard deviation of marital satisfaction and the results of Student t-tests for comparing the staff's marital satisfaction rates**

Work shift	Number	Marital satisfaction		t-test results
		Mean	Standard deviation	
Morning shift	54	173	29.91	T=3.28
Rotational	111	155.08	34.15	P=0.001
Work shifts in separate for genders				
Women working in morning shifts	40	168.97	31.01	T=2.97
Women with rotational shifts	82	150.34	33.1	P=0.004
Men working in morning shifts	13	183.69	24.63	T=1.35
Men with rotational shifts	28	169.28	34.38	P=0.18
Work type in separate for job shifts				
Administrative-morning shift	35	169.71	31.80	T=1.46
Administrative-rotational	4	145.50	26.80	P=0.15
Treatment-morning shift	19	179.05	25.77	T=2.84
Treatment-rotational	107	155.43	34.44	P=0.005

As it is shown in the above table's results, the marital satisfaction amount in the staff working in morning shifts is significantly higher than that of the staff with rotational job shifts. Although the investigation of the results on the marital satisfaction rates in separate genders indicated that the job shift is effective in the marital satisfaction of women, no difference was documented in men between the individuals' marital satisfaction in the morning and rotational shifts. In the investigation of marital satisfaction based on the work type, as well, the results indicated that the job shift is more effective in the marital satisfaction of the treatment staff. In other words, the treatment staff working in morning shifts was found to enjoy more marital satisfaction than the treatment staff working in rotational shifts while this difference was not evidenced in administrative staff. Furthermore, the results of the chi-square test in the investigation of the relationship between life satisfaction levels and job shifts indicated that there is a significant relationship between these variables ( $\chi^2=14.003$  and  $p=0.007$ ).

## Discussion

The results of the present study indicated that the marital satisfaction of Jiroft's Medical Sciences University is in ranges from intermediate to high. Also, amongst the marital satisfaction aspects, the highest satisfaction rate was found in the conflict-resolution and religious orientation aspect, and the lowest satisfaction rate was found in the aspect related to the men-women parity roles. The results of this study are consistent with what has been found in the study by Askarian et al.<sup>20</sup> about the nurses' marital satisfaction in the religious orientation but they are not in accordance with one another regarding the conflict-resolution aspect. Put it differently, in their study as well as in the study by Wagheiy et al.<sup>21</sup>, conflict resolution was found with a lower score regarding marital satisfaction rate. Conflict is one of the inevitable issues of common life<sup>22</sup>.

There are supportive pieces of evidence indicating that the couples enjoying good conflict-resolving skills such as problem-solving, expression of affections, and control of the detrimental emotions possess higher marital satisfaction<sup>22</sup>. Enjoyment of good conflict-resolving skills can be the reason for the relatively high marital satisfaction in this study. As for the high score of the religious orientation, as well, the studies have shown that communication with God plays an important role in the marital relations<sup>16</sup>. According to Durkheim, religion regulates behaviors by creating common values and norms and, if it is observed constantly, it can bring about coherence inside the family and reduce the divorce likelihood<sup>23</sup>. As for the low score of the men-women parity roles, according to the fact that the balance of the responsibilities and cooperation between the couples has a positive effect on marital satisfaction<sup>24-26</sup>, it seems that this issue needs more attention regarding the enhancement of the staff's marital satisfaction.

## Conclusion

In the investigation of the effects of job shifts on the marital satisfaction rate, it was made clear that gender and work type play an effective role. Put another way, job shift has a significant effect on the marital satisfaction of the women and staff of the treatment sector. In the study by Khalili et al.<sup>15</sup>, as well, and in coordination with the results of the present study, the marital satisfaction rates of the nurses were very high. Although more than 50% of the staff reported a relatively high marital satisfaction in the present study, the marital satisfaction of the women and staff working in the treatment sector such as nurses was still significantly lower. These results support the findings of the studies by Colligan<sup>14</sup> and Rosa Grosswald<sup>12</sup> and Askarian et al.<sup>20</sup> about the effect of the job turn on marital satisfaction. Based on the research by Madid<sup>27</sup>, more than 75% of the female nurses believed that overnight job shifts cause disruptions in their lives and prevent them from being with their husbands. The increase in the work pressure causes an increase in marital satisfaction<sup>28</sup>. Rotational job shifts mean unusual or irregular work programs and working beyond the normal daily workhours<sup>29</sup>. Rotational job shifts are amongst the primary factors of conflict between work and family<sup>30,31</sup>. This conflict can be in both structural and psychological forms. Structural conflict means that how much the organization and the role the individual plays in the organization influence the controlling of and paying attention to the family's wants. Psychological conflict, as well, means the individual's energy level and disposition at home which are both influenced by employment<sup>27</sup>. Working in rotational job shifts can reduce the period of time the couples can be together and their satisfaction of their relations will be consequently decreased. Based on the study by Presser<sup>13</sup>, the amount of marital satisfaction in the staff working in rotational job shifts is lower than the others. The rotational job turns to cause social seclusion, increase in depression, and reduction of the bilateral marital actions and, on the other hand, they may cause conflicts in the occupational and familial obligations<sup>13,20</sup>.

Amongst the present study's constraints, the individuals' worriedness about the disclosing of their personal and familial issues hence the impossibility of making interviews can be pointed out. However, considering the obtained results and the importance of the work-family conflict reduction in line with enhancement of the university staff's productivity, it is suggested that the instructional and counseling courses should be held for couples with an emphasis on the importance of balance and cooperation in the responsibilities at home for the employed couples. Furthermore, considering the greater effect of the work conditions on women and their larger responsibilities in-home, flexible work hours should be considered for the employed women.

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