



Study of Factors Affecting Disability and Job Stress in Zahedan University of Medical Sciences

Abdolali Keshtegar^{1*}, Behroz Rezaei², Maryam Jalili³, Mohammad Ali Sarhadinasb⁴, Tayebeh Fani⁵

¹Department of Human Resource Management, University of Sistan and Baluchestan, Zahedan, Iran, ²Department of Human Resource Management, University of Sistan and Baluchestan, Zahedan, Iran, ³Department of Human Resource Management, University of Sistan and Baluchestan, Zahedan, Iran, ⁴Department of Human Resource Management, University of Sistan and Baluchestan, Zahedan, Iran, ⁵Department of Human Resource Management, University of Sistan and Baluchestan, Zahedan, Iran.
*Email: alikestegar@yahoo.com

ABSTRACT

One of the concepts which has received a great deal of attention during the recent years from the organizational-industrial psychologists is the fatigue, exhaustion, lassitude, torpidity, languor and indolence in the job operators which is known as the so-called disability and job stress. The objective of the present study is to identify and prioritize the effectors which influence the disability and job stress in the Zahedan University of Medical Sciences. The present study is an applied research in terms of the methodology it adopts because the indices extracted from the study literature are identified and rated according to the study conceptual model and the organizations can take advantage of the results presented herein to devise the best strategy and choose the most optimum indices and put them into practical use. In the present study, the study theoretical principles and the study background have been drawn out of the library searches and the study of university articles and journals and also it has to be mentioned that the field study methods and thorough analysis of the study population have been applied as a source of collecting statistical information for testing the study hypotheses. The study population in the present study is basically consisted of the entire managers working in Zahedan University of Medical Sciences the total number of whom reaches to 150 individuals and subsequently a number of 108 individuals were selected as the study sample volume by making use of Morgan's table. To analyze the data, analytic hierarchy process method has been employed along with making use of Expert Choice software. The results of the study indicated that environmental, organizational, individual and vocational factors are found of a great effect on the disability and job stress in the nurses.

Keywords: Disability and Job Stress, Environmental Factors, Organizational Factors, Individual Factors, Vocational Factors

JEL Classifications: J28, L2

1. INTRODUCTION

Nowadays, human workforce is enumerated as one of the most valuable organizational capital and it is at the same time seen struggling and facing with numerous problems and challenges and in case of having a clear-cut knowledge of the factors effective on the increase or decrease of the human efficiency, the management specialists and the organizational psychologists can take advantage of them to add to the positive factors effect and lower the intensity of the negative factors (Azari and Davudiyantalab, 2011. p. 13). Since 1974, the member countries in the World Disregarding the financial security, working and having a job can satisfy some of the human basic needs such as mental and physical agility, social

interaction, sense of self-worth, self-confidence and capability. However, job can be a source of substantial pressure (Bakhshipur and Moghaddam, 2008; Amiri et al., 2010). Some of the concepts which have been greatly focused on by the organizational-industrial psychologists, namely, fatigue, exhaustion, lassitude, frailness and limpness in the job operators which is also known as the so-called "disability and job stress." Disability and job stress is a phenomenon which has attracted the attention of the psychologists and the scientists doing research on management fields. Disability and job stress is in fact a type of mental weariness which is concomitantly accompanied by mental pressures and stresses related to jobs and work environments. Such a disorder is commonly observed in various types of occupations in which care seekers are assisted

and aided by the care providers such as the jobs carried out by the counselors, teachers, social workers, physicians, nurses and other professions of the like and it is highly associated with stressful and tensing stimulants such as having to deal instantly with a great number of the individuals who refer seeking to find a help source, being in shortage of time and not receiving so much support and appreciation (Malek Ara, 2008. p. 82). Disability and job stress and stress in many of the cases cause absenteeism and wastage of the work days. In this regard, Cox has been quoted in the following words “it has been estimated that every year 37 million work days are lost on average due to reasons such as mental disorders, nervous discomforts, headaches and so forth and the worn-out individuals get lost of their affective feelings and emotions which would be otherwise applied to handle the care-seekers and even in some of the cases cares are offered inappropriately and inhumanly” (Cox, 1988). A nurse experiencing disability and job stress is often found with discomfort, fatigue, having no tolerance for the others, bitterness in treating the patients and their families, seeking remoteness from the peers, anger and generally s/he will turn into an individual which cannot be tolerated by the others (Douglass, 1996; Brooking, 1992). Regarding disability and job stress, Hosseini writes “the issue of analyzing the staff potencies for the time being is a serious problem which has plagued all of the health systems” (Hosseini, 2000).

In a survey which was carried out by Moghimian, the results indicated that the disability and job stress mean score in the study units has been 48.95 ± 13.83 and 78.2% of the studied individuals had to be placed in the intermediate class of disability and job stress (Moghimian, 2003).

Kilfedder et al. randomly studied 510 Scottish nurses working in psychiatry offices based on Maslak questionnaire to survey disability and job stress in the nurses from psychiatry units. The respondents indicated intermediate, low and intermediate rates of emotional fatigue, depersonalization and personal adequacy, respectively (Kilfedder et al., 2003; Maslach and Jackson, 1982).

Human resources development is recounted as one of the challenges which is required to be handled by the human resources planners in the modern industry and besides selecting and appointing qualified the human resources one should try to provide for an appropriate grounding to keep it that way. In line with human resources retention, the emergence of vocational pressures is one factor that endangers the human workforce general health and it has been long considered as one of the study priorities dealt with in the traditional medicine.

Based on the multifactor productivity theory, the optimum organizational productivity is achieved on the condition that all such factors can be envisaged as being parallel, contributing and optimum. Therefore, when getting access to the higher levels of organizational productivity it had to be made sure that the organizational human resources should not be suffering from disability and job stress and symptoms arising therefrom. In the present study, the main objective pursued by the current research paper is the identification of the extent and the prevalence rate of the disability and job stress symptoms and it is tried herein to determine disability and job stress etiology and then epidemiology through emphasizing on certain factors.

2. STUDY CONCEPTUAL MODEL

According to the study background and study literature information, factors which are a great effect on disability and job stress can be stated as below:

1. Environmental factors
2. Individual factors
3. Organization-related factors
4. Job-related factors.

The study conceptual model has been depicted in the following illustration.

3. STUDY QUESTIONS

1. What are the factors effective on the disability and job stress of the Zahedan University of Medical Sciences?
2. How is the prioritization of the factors effective on disability and job stress of the Zahedan University of Medical Sciences?
3. What solutions can be devised for fighting against disability and job stress?

4. STUDY METHODOLOGY

The present study is an applied research in terms of the study methodology because the indices extracted from the study literature have been identified and rated according to the study conceptual model and the organizations can select and employ the best solutions and strategies according to the results presented in the current study. The study population in the present research which is a case study includes all of the managers working in Zahedan University of Medical Sciences the total number of whom reaches to 150 individuals out of which 108 individuals were selected as the study sample volume by taking advantage of Morgan's table. In the present study, library research and university articles and journals studies have been used as the cornerstone in gathering information upon which the study theoretical principles and study background have been drawn and also field studies and doing research on the study population have been used for collecting statistical information for the purpose of testing the study hypotheses. Also, interviewing with experts and the elites and preparing questionnaires related to the evaluation of the factors effective on disability and job stress are other methods of acquiring information. The data extracted from the questionnaires have been analyzed by taking advantage of Expert Choice and analytic hierarchy process tests have also been used to prioritize the indices. To validate the questionnaires, Cronbach's alpha method has been the method of choice for the present study the data for all of which have subsequently been analyzed in SPSS ver.16.

5. STUDY FINDINGS

5.1. Disability and Job Stress Effective Factors Ranking

In the Table 1, the average relative weight of each of the scales has been estimated. Based on the Table 1, the occupational factors item indicates the highest average relative weight and the individual factors item indicates the lowest average relative weight. Also,

the inconsistency coefficient of the matrix has been calculated as being equal to 0.007 and this coefficient is considered a highly appropriate one. Inconsistency coefficient is normally indicative of the extent to which pairwise comparisons are considered as reliable and it has been shown through experience that if the coefficient gets a value approximately smaller than 0.1 the comparisons are deemed as acceptable.

5.2. Disability and Job Stress Effective Environmental Factors Ranking

In the Table 2, average relative weight for each of the scales has been estimated. Based on the Table 2, the item organizational justice with the weight coefficient of 0.419 indicates the highest average relative weight and the item social network with the weight coefficient of 0.062 indicates the lowest average relative weight in respect to the main scale. Also, the inconsistency coefficient of the matrix was computed with a value of 0.02 and it is considered as an appropriate value. Such a coefficient basically is suggestive of the extent to which the pairwise comparisons are found reliable and it has been made clear through experience that if such a coefficient's value is found smaller than 0.1 the comparisons are considered as being in an acceptable range.

5.3. Disability and Job Stress Effective Vocational Factors Ranking

In the Table 3, the average relative weight for each of the scales has been estimated. Based on this, the great difference in the salaries and wages received by the peers from the same level of a job group with the weight coefficient of 0.380 indicates the highest and the item the individual's specific characteristics with the weight coefficient of 0.053 indicates the lowest average relative weight for the disability and job stress vocational factors scale. Also, inconsistency coefficient of the matrix was found to be 0.02 which is suggestive of the appropriateness of the coefficient. Such a coefficient basically represents the extent to which the pairwise comparisons are reliable and it has been indicated through experience that if inconsistency rate is found smaller than 0.1 then the comparisons are said to be acceptable.

5.4. Disability and Job Stress Effective Individual Factors Ranking

In the Table 4, the average relative weight for each of the scales has been estimated. Based on this, the item age with a weight coefficient of 0.459 indicates the highest and the item gender with a weight coefficient of 0.057 indicates the lowest relative weight in respect to the main scale. Also, the inconsistency rate of the scale has been found to be equal to 0.01 which is regarded as a very appropriate one. Such a coefficient is fundamentally representing the extent to which the pairwise comparisons are reliable and it has been made clear through experience that if it is smaller than 0.1 the comparisons made are acceptable.

5.5. Disability and Job Stress Effective Organizational Factors Ranking

In the Table 5, the average relative weight for each of the scales has been estimated. Based on this, the item the supervisor's lack of attention to the quality and the quantity of the work with a weight coefficient of 0.278 indicates the highest and the item

Table 1: General disability and job stress effective factors average relative weight calculation matrix

Subscales	Average relative weight	Inconsistency rate
Environmental factors	0.143	0.007
Organization-related factors	0.264	
Individual factors	0.086	
Job-related factors	0.570	

Table 2: Disability and job stress effective environmental factors average relative weight calculation matrix

Subscales	Average relative weight	Inconsistency rate
Organizational justice	0.419	0.02
Organizational support	0.263	
Participation	0.160	
Social network	0.062	
Social-economical base	0.097	

Table 3: Disability and job stress effective vocational factors average relative weight calculation matrix

Subscales	Average relative weight	Inconsistency rate
Type of the job and work characteristics	0.067	0.02
Individual's own characteristics	0.053	
The lack of a reasonable fitness between the total monthly income and the life expenditures	0.248	
Being unfamiliar or slightly familiar with the one's occupational duties due to reasons such as being deprived of taking part in educational and training courses	0.156	
Large difference between the salary and the wages received by the peers in the same level of the job group	0.380	
Being forced to participate in boring and tiring training and instructional courses	0.096	

Table 4: Disability and job stress effective individual factors average relative weight calculation matrix

Subscales	Average relative weight	Inconsistency rate
Age	0.459	0.01
Gender	0.057	
Education level	0.089	
Marital status	0.145	
Work records	0.250	

role ambiguities with the weight coefficient of 0.040 indicates the lowest average relative weight in respect to the primary scale. Also, the inconsistency rate obtained for the matrix is 0.06 which is considered as a very appropriate. Such a rate is essentially

Table 5: Disability and job stress effective organizational factors average relative weight calculation matrix

Subscales	Average relative weight	Inconsistency rate
Role ambiguities	0.040	0.06
Role conflicts	0.059	
Assigning the employees with responsibilities far beyond their capacities	0.080	
Role density	0.042	
Uncertainty of the scientific criteria and standards in selecting the staff	0.143	
The unit supervisor's lack of attention to the work quality and quantity levels	0.278	
The inappropriateness of the supervisor's method of choice for communicating with the employees	0.124	
Giving no value to the creative suggestions in line with better accomplishment of the job responsibilities	0.235	

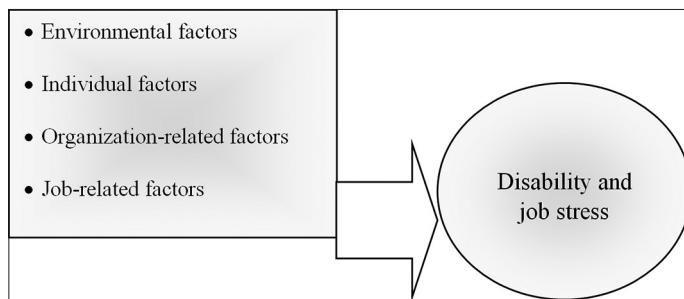
representative of the extent to which the pairwise comparisons are reliable and it has been insured through experience that if its value is found to be smaller than 0.1 then the comparisons are considered as acceptable. The diagram related to the organizational factors of an effect on the disability and job stress rate has been presented below.

The fourth and the last step includes blending the relative weights; in other words, after the pairwise comparisons are carried out and the scales and subscales relative weights are calculated it is necessary for the final weight of each item to be computed:

The Table 6 presents the final results of the analytic hierarchy process. In other words, the Table 6 provides an orderly illustration of the factors of great importance in terms of the effects they exert on the disability and job stress. As it is indicated by the calculated final weights, the highest significance belongs to the great difference in the salaries and wages received by the peers, in the same level of a job group, with the weight coefficient of 0.180 and the lowest significance goes to gender with a weight coefficient of 0.004. Also, the inconsistency rate of the matrix has been found equal to 0.02 which is considered as appropriate.

Table 6: Each subscale total weight calculation matrix

Subscales	Final weight	Final priority	Inconsistency rate
Social network	0.007	22	0.02
Participation	0.019	16	
Organizational support	0.032	10	
Organizational justice	0.051	6	
Social-economical base	0.012	20	
Role ambiguity	0.013	19	
Role conflicts	0.020	15	
Assigning the employees with responsibilities far beyond their capacities	0.027	13	
Role density	0.014	18	
Uncertainty of the scientific criteria and standards in selecting the staff	0.048	7	
The unit supervisor's lack of attention to the work quality and quantity levels	0.094	3	
The inappropriateness of the supervisor's method of choice for communicating with the employees	0.042	9	
Giving no value to the creative suggestions in line with better accomplishment of the job responsibilities	0.079	4	
Age	0.031	12	
Gender	0.004	24	
Education level	0.006	23	
Marital status	0.010	21	
Work records	0.017	17	
Type of the job and work	0.032	11	
Individual's own specific attributes	0.025	14	
The lack of a reasonable fitness between the total monthly income and the life expenditures	0.117	2	
Being unfamiliar or slightly familiar with the one's occupational duties due to reasons such as being deprived of taking part in educational and training courses	0.074	5	
Large difference between the salary and the wages received by the peers in the same level of the job group	0.180	1	
Being forced to participate in boring and tiring training and instructional courses	0.046	8	

Figure 1: Study conceptual model

6. CONCLUSION

Based on the results obtained from the section four in response to the first question of the study expressing “what are the indices influencing the disability and job stress in the Zahedan University of Medical Sciences”, it can be stated that the effective factors were identified as follow: Environmental factors, organizational factors, individual factors, vocational factors, also it has to be mentioned that there are subscales for each of these indices, including the followings:

- Environmental factors: Social networks, participation, organizational support, organizational justice, social-economical base
- Organizational factors: Role ambiguities, role conflicts, assigning the employees with responsibilities well beyond their capacities, role density, uncertainty of the staff selection criteria and standards, the supervisor’s lack of attending to the quality and quantity of the works accomplished, inappropriateness of the methods adopted by the supervisor in communicating with the staff, giving no value to the creative suggestions and recommendations in line with better accomplishment of the job responsibilities
- Individual factors: Age, gender, education level, marital status, work history
- Vocational factors: Type of the job and works, the individual’s own specific characteristics, the lack of a reasonable fitness between the monthly incomes and the life expenditures, lack of familiarity or having a trivial familiarity with one’s own job responsibilities due to reasons such as deprivation from taking part in instructional and training courses, large differences in the salaries and wages received by the other peers of the same and within the same level of job group, being urged to participate in boring and tiring educational and instructional courses.

In the following part and in seeking to find an answer to the second question put forth in the present study regarding the way the indices effective on the disability and job stress are prioritized, there is made use of analytic hierarchy process and the results were

suggestive of the idea that the most important scale is vocational and job-related factors, then the other important scales, according to their priorities and significances, were organizational factors, environmental factors and individual factors.

Also, in the final stage of the analytic hierarchy process the order with which the most important factors effective on disability and job stress in the Zahedan University of Medical Sciences should be presented was investigated and it was made clear that the highest importance belongs to the subscale “the large difference between the salaries and the wages received by the peers in the same level of a job group.”

According to the results obtained from the present study. The following suggestions are made in order for the staff disability and job stress effective factors (individual, organizational, vocational and environmental) to be improved:

1. A change in the mindset regarding the job and life and optimism in respect to oneself and the others.
2. The organizational management attentiveness to the staff issues (welfare, treatment, leisure and so forth).
3. Minimizing the organizational risky conditions and providing for facilities and possibilities in which the individuals are not exposed to stressing and tensing stimulants.
4. Providing a larger deal of support from the superiors’ side, vesting greater authority in the vice presidents and chancellors.

REFERENCES

- Amiri, M., Asadi, M.R., Delbari, R.F. (2010), The survey of the disability and job stress status among the bank clerks and solutions for improving it”. *Business Management*, 3(7), 37-56.
- Azari, G.R., Davudiyantalab, A.H. (2011), Comparing job burnout and musculoskeletal deformities among the computer users and the administrative staff”. *Research Plan Reports Approved by Welfare Sciences University and Rehabilitation*.
- Bakhshpur, M., Moghaddam, B.A.B. (2008), How do engaged employees stay engaged? *Ciencia and Trabajo*, 14(3), 15-12.
- Brooking, J. (1992), *A Text Book of Psychiatric and Mental Health Nursing*. Edinburg, London: Churchill Livingstone.
- Cox, J. (1998), *A Text Book of Psychiatric and Mental Health Nursing*. Edinburg, London: Churchill Livingstone.
- Hosseini, A. (2000), Analysis of physical and mental powers of labor and its prevention methods. *Journal of Mental Health*, 1(2), 65-79.
- Kilfedder, M., Leenders, M. (2003), Burnout and older workers’ intentions to retire. *International Journal of Manpower*, 31(3), 306-321.
- Malek, R. (2008), The impact of emotional labor on work exhaustion for three distinct emergency medical service (EMS) samples. *Career Development International*, 15(6), 600-608.
- Maslach, C., Jackson, S. (1982), Burnout in health professions: A social psychological analysis. In: Sanders, G., Suls, J., editors. *Social Psychology of Health and Illness*. Hillsdale, NJ: Erlbaum. p152-227.