Original Article

Evaluation of Social Performance and Related Factors in Iranian Central Iron Ore company workers

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Abstract:

Introduction: Psychological and social health is the main problems of worker population, which can increase productivity at work and physical and mental health and provide or decline in these aspects.

Materials and Methods: this study was descriptive and crosses - sectional and has been performed on 388 Iranian central iron ore company workers. The tool of study was standard GHQ-28 question are that has been measured under social performance scale.

Results: 49.3 and 49 percent of the people have favorable and average score from the state of the social function condition and 1.8 percent of people have severe social dysfunction and besides the employees have less work experienced that have more social dysfunction and there is a relationship between the P = 0.026. With satisfaction with the status of social dysfunction (P = 0) and with the consent of the income (P = 0) there is a significant relationship.

Conclusion: In this study, a significant percentage of mineworkers were not in good condition from health, social functioning. It reveals the importance of addressing health issues and vulnerable working class, Intervention studies conducted by employers to improve job satisfaction and increased income and received social support from him, can increase the health indicators related to the body and mind.

Keywords: Public Health; Mental Health; Occupational Health; Social Work

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Introduction

Social performance state has a large effect on physical and psychological health along with work satisfaction and various aspects of life quality [1, 2]. It is recognized as a balancing factor in order to cope with stress conditions of life [3]. Similarly, occupational factors are considered as the most important stress factors [4] that can result in various psychological problems [5]. These complications have negative physical, psychological and social effects on personal lives of employed people that ultimately lead to detrimental effects on the health and security of their families [6]. Mineworkers are always at a greater risk of health deterioration because of heavy physical work and tiredness [7].

Psychological and social health is the most important problems in the worker population that alone can increase the productivity and improve the physical and mental health or would have failure in this respect. Due to the miners are working in the remote location of the family and High pressures and constraints and the need to comply with employment problems facing psychological disorders Such as reduced social functioning, they can have serious personal and social tension and communication problems and lack of job satisfaction [8,9]. In a study was done by Shahrokhi on the overall health status of female workers in Qazvin, The most common health problems for women were in their social functioning (45%) and a significant number of workers had stress and sleep disorders (35%)[10]. Also at Research was performed by mortal on the evaluation mental health and social functioning of workers at a computer manufacturing company in Japan, and was used a GHQ-28 questionnaire on 781 computer engineers and 214 office workers. It was observed that the psychological health of the engineers was better than the office workers and there was not a significant relationship between work experience and psychological health of the computer engineers [11]. Several studies indicate that Psychological factors at Routine activities are recognized as a factor In order to efficiently Health and Many economic losses can be imposed on society [12]. Meanwhile, Lack of health may cause work related accidents in workers [13]. With regard to the specific circumstances of the Iran Central Iron Ore Mine, In terms of working and environmental conditions, which makes it one of the most vulnerable workers are employees in the province. In this study, we determine the general health status and dysfunction state at mining social performance association with job satisfaction, type of occupation and income and work related accidents.

Materials & Methods

This study is a descriptive and cross - sectional and was done at the Iranian Central Iron Ore Company in 2006 and 388 samples chose randomly. The research tool in this study was Questionnaire GHQ-28, which in the first section included demographic characteristics of the workers that included age, type of occupation, and work experience, marital status, and smoking, level of satisfaction from

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job, income, employer and work-related accidents. In the second section of mentioned Questionnaire determined the state of social performance and its validity and reliability was confirmed by domestically and abroad specialists [14,15].

The questionnaire was read for all of the workers under similar conditions and filled without any interference and whole data workers will be kept confidential by researcher. Scoring was done by simple Likert method such that each question was scored from right to left as 0, 1,2 and 3, meanwhile The number of questions related to social performance was 7 options and scoring status and cut-off point of social function was such that those people got scores less than 7 that indicates to have excellent social performance, 7-14 as Moderate social performance and Score of 14 and above as deterioration in subjects on this subscale.

Data was entered into the SPSS software program and used statistical tests included variance analysis and coefficient correlation tests. P value of 0.05 was considered as significant.

Results

In this study, 388 people of Iran Central Iron Ore Mining Company Staff were studied of the dysfunction at social performance According to scale of the GHQ-28. According to the results, all of subjects were male and mean and standard deviation of the age were 48±4.2 years and 10.6% single and 89.4% were married, 23.2% were miners, 25.3% mechanics, 15.7% worked in the transport department, 24.2% administrative department, 8.8% supervisors and headworkers of various mining departments and 2.8% were included in the others group.

Table 1. Distribution of dysfunction options of social performance according to GHQ criteria in subjects

Social performance according to GHQ criteria	More than usual N (Percentage)	As usual N (Percentage)	Less than usual N (Percentage)	Seldom N (Percentage)	Total
Occupied	47 (12.1)	290 (74.7)	41 (10.6)	10 (2.6)	388
Spending more time for work	104 (26.8)	171 (44.1)	94 (24.2)	19 (4.9)	388
Performing work excellently	68 (17.5)	277 (71.4)	38 (9.8)	5 (1.3)	388
Sense of satisfaction from method of completing work	67 (17.3)	275 (70.9)	35 (9)	11 (2.8)	388
Sense of having a useful role in works	101 (26)	252(64.9)	7 (27)	8 (2.1)	388
Capability of Decision making	84 (21.6)	261 (27.3)	36 (9.3)	7 (1.8)	388
Pleasure from Life	84 (2.6)	261 (27.3)	36 (9.3)	7 (1.8)	388

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Of total people who responded to questions, 74.5% had Favorable general health conditions while 23.5% had poor general health conditions. Diagram number 1 shows that 49.3% had ideal social performance scores,49% intermediate scores and 1.8% had sever dysfunction in their social performance.

The distribution of disorders in social performance according to the GHQ criteria is presented in Table 1.

Table 2. Relationship between frequency and mean of GHQ criteria and its subscales with work experience in subjects

Work experience	**< 6 years**		**6 -14 years**		**> 14 years**		**Total**		P_{value}
	N	Mean±SD	N	Mean±SD	N	Mean±SD	N	Mean±SD	
Physical Health	109	3.94 ±1.2	160	4.42±1.35	119	3.8 ±1.43	388	4.09±1.53	0.415
Stress and sleep disorders	109	4.19 ±1.12	160	5.23±1.41	119	4.35 ±1.15	388	4.67±1.19	0.216
Disorder in social performance	109	7.94 ±2.13	160	6.75±2.11	119	6.67±2.17	388	6.81±1.88	0.026*
Depression	109	2.44 ±1.88	160	6.46±1.91	119	1.45 ±0.98	388	2.15±0.91	0.367
Total GHQ	109	17.6 ±3.21	160	18.8±2.98	119	16.2 ±2.86	388	17.7±2.89	0.088

- 0.05 is significant.

Table 2 shows the relationship between the Frequency and mean and Standard deviation of the GHQ scores and its subscales with work experience in subjects. The mean score at dysfunction subscale of social performance is high in workers who have work experience less than the others, In other words, workers with less work experience had more problems in social performance as compared to those with much more work experience and in this sense, Statistical tests were performed and the viewpoint that Only between social dysfunction were significantly associated with work experience (P = 0.026).

Table 3. Relationship between the frequencies of dysfunction state at social performance with work satisfaction in subjects

Social Performance	**Work satisfaction**				Total
	Dissatisfied N(percentage)	Relatively satisfied N (percentage)	Satisfied N (percentage)	Highly satisfied N (percentage)	
Optimal health	52 (17.5)	107 (36)	85 (28.6)	53 (17.8)	297 (100)
Lack of health	36 (39.6)	33 (36.3)	18 (19.8)	4 (4.4)	91 (100)
Total	88 (22.7)	140 (36.1)	103 (26.5)	57 (14.7)	388 (100)

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The results of this study show that There was a significant relationship between dysfunction state of social performance and work satisfaction in subjects (P = 0) (Table 3).

Table 4. Relationship between the frequency and mean of GHQ and dysfunction subscale at social performance with income satisfaction

	Satisfied		Not satisfied		Total		P value
	N	Mean	N	Mean	N	Mean	
GHQ	222	15.05±2.32	166	21.28 ±2.18	388	21.72 ±3.12	0.000
dysfunction in social performance	222	6.52 ±1.83	166	7.19 ±2.11	388	6.81 ±1.93	0.011

Table 4 shows the relationship between the mean and standard deviation of the GHQ score and dysfunction subscale of social performance with income satisfaction.

The results of the statistical tests showed that there was a significant relationship between mean GHQ score and level of satisfaction of income (P = 0).

In other words, workers with lower levels of satisfaction from income had poorer general health conditions, meanwhile there was a significant relationship Between the mean scores of dysfunction at social performance with income satisfaction too (P = 0.011), This means that employees who are dissatisfied with their income and they have dysfunction at social performance, But the results of this survey are indicated that There was significant relationship between the dysfunction subscale of social performance and a history of work-related accidents (Table 5).

Table 5. Relationship between dysfunction states at social performance with history of work accidents in subjects

Criteria of disorder in social performance	History of work accident		Total
	Yes	No	N (percentage)
	N (percentage)	N (percentage)	
Ideal health	26 (13.6)	165 (86.4)	191 (100)
Moderate Health	33 (17.4)	157 (82.6)	190 (100)
Poor Health	1 (14.3)	6 (85.7)	7 (100)
Total	60 (15.5)	238 (84.5)	388 (100)

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Discussion

In this study, according to the cut-off scores of the general health questionnaire, 23.5% of subjects did not have ideal health conditions that are similar to the results of the study by Moslem hesam in Gorgan [9] and Rafati [16]. But the study was done by Danesh on control tower and Aseman Airline staff showed that 19.7% of the control tower staff and 14.3% of the Office staff did not have ideal health conditions [17] and meanwhile In the study was done by Shahrokhi on Female workers in Qazvin factories, that totally, 35% had problems in their general health conditions [10].

The results of the present study showed that 50.7% of the workers of the Iranian Central Iron Ore Company had some disorder in their social performance, while In the study was done by Shahrokhi, 45% of the workers in Qazvin, had problems in their social performance [10] that somewhat is consistent with our study. It seems that miners take into account the volume and long working and away from urban amenities and lack of social communication, sometimes go through a lot of stress and this can affect their social functioning.

The results of the present study showed that workers with lesser work experience had more problems in their social performance. Masooleh Abdi also reached similar conclusions in her study and stated that high stress jobs, young workers and those with lesser work experience have more psychological problems including their social performance and there is a meaningful relationship between work experience and the above-mentioned criteria [18]. It can be concluded that probably the majority of the young workers with less work experience cannot prove their competency in the workplace and outside the workplace And in the current situation is due to the lack of positive conditions and lack of individual efficiency can lead to Reduce their self confidence which This could be the underlying dysfunction in social functioning.

Khaganizadeh also concluded that there is a significant relationship between psychological health, social performance and variables like work experience, overtime and shift work [19,20]. The results of the Hojjati's study also show the relationship between work experience and night shift work with disordered in social performance and he believes the cause of this problem is related to the decrease in the fun and participate in social activities And deprivation of facilities and recreational and social functions as the cause of public health problems and social functioning [21].

Based on the results of this study, there is a meaningful relationship between the states of social performance with the level of satisfaction from work. Consequently, some studies show that Perception of social support has an effect on the physical and psychological state, life satisfaction and various aspects of quality of life[1,2]. It is considered as an effective regulatory factor for coping with stress factors of life[22]. The results of the Moslem's studies also shows that there is a

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Significant relationship between Life satisfaction to mental health and social functioning [22], And in this sense with the study of Tajalli and coworkers [2], Bakhshipour Roudsari [23] and Ghaeedi and Yaghoobi[24] are consistent with Our study and According to another study, inappropriate working conditions, hard working, Unfavorable position in work team, job insecurity and psychological- social problems Among the factors that could Cause of job dissatisfaction and decreased social functioning and mood disorders.

The results of the present study showed that there is a meaningful relationship between a mean GHQ score and level of income satisfaction, but the study of Khaganizadeh stated that there is no meaningful relationship between psychological health and economical state satisfaction [19]. On the other hand, the results of the Halvani's study are consistent with the present study [25]. According to the results of this study, It seems that With interventional programs that increase employee satisfaction is related to their jobs and income it will be Significant impact on improving physical and mental health status, Mental health is also necessary to maintain and sustain social and occupational functioning of individuals and Main objective is community mental health programs. Lack of satisfaction of job and income lead to reduce motivation and quality of work and loss of staff concentration and certainly would have the greatest impact on their social functioning [17].

Moslem in his study concluded that increased levels of social support, especially by the family increase the levels of life satisfaction[9], meanwhile the results of this study is consistent with the study of Karademas, that showed t social support is directly related to life satisfaction, especially income satisfaction [26]. Social support both directly and indirectly affect on recognition mechanisms, various behavioral patterns and Coping strategies and through this way will improve the health and life satisfaction.

Conclusion

In the present study, a substantial amount of workers did not have an appropriate social health level that signifies the importance of addressing the health conditions of this hard working, vulnerable population. Considering their hard working conditions and health restricted and recreational facilities, it is proposed that interventional studies with the aim of improvement of psychological health and life satisfaction levels should be done and employers along with the related officials should provide better social support to this population.

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