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# Comparison of Temporary And Permanent Workers' Job Satisfaction And Mental Health In Isfahan Steel Company

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## **Abstract :**

**Objectives:** Increasing presence of temporary employees in the world economy as well as Iran increases the importance of understanding their mental health and job satisfaction. This research investigates and compares general health, occupational stress and job satisfaction between permanent and temporary employees in Isfahan Steel Company.

**Methods:** According to the safety experts one unite was selected as a sample of the study due to nature of hard and dangerous work and all of the workers were studied by census method. Data were collected by questionnaires including GHQ-28, Job Descriptive Index (JDI), and stress questionnaire and were analyzed by SPSS.

**Results:** Eighteen point two percent of temporary and 9.3% of permanent employees recorded severe stress; 12.4% of temporary and 8.1% of permanent employees recorded undesirable condition according to mental health scores.

**Keywords:** Occupational Stress, Job Satisfaction, General Health, Isfahan Steel Company

## **1 INTRODUCTION**

In recent years, mental health and job satisfaction have become a growing concern and increasingly have influenced employee's health.

Mental health disorders frequently category as the first or second most common cause of extended sick leave from work, the International Labor Organization considers that psychosocial problems make up, in the world, one of the principal causes of accidents, illness, absenteeism, and death in the workplace [1].

In this situation to promote mental health in workplace is one of the most important organization missions thus employees are the most

valuable property organization and healthy employees are the most effective tool in management to reach permanent development.

Job satisfaction generally referred to as an enjoyable or positive emotional state resulting from the appraisal of one's job or the state of mind that results from an individual's requirements or values being met by the job and its environment [2].

Effectiveness of an organizational structure has been closely linked to the level of job satisfaction among the employees [3].

In the other words having a higher level of satisfaction among the employees of an

organization is considered to be imperative for several reasons including its correlation with key employee behavioral characteristics and probably remarkable effects on the whole performance of the organization, For instance organization commitment [4-7]; organizational citizenship and in-role behaviors [8-9]; the general well-being of the employees [10]; productivity [11] as well as safety and occupational health.

Kerr investigated the relationship between the HSE MS and the following stress-related work outcomes: 'job satisfaction', job-related anxiety and depression and errors/near misses. The results showed the HSE MS (as measured by the HSE Indicator Tool) were positively associated with job satisfaction and negatively associated with 'job-related anxiety', 'job-related depression' and 'witnessed errors/near misses' [12].

A recent study examined the relationship between stress and productivity of employees at the Mess-Sarcheshmeh Company in Iran; point out that stress in the 95 percent confidence level and loyalty and job satisfaction in the 90 percent confidence level were associated with workers productivity and job satisfaction had most effect on workers' productivity [13].

Although numerous studies have investigated job satisfaction, mental health and other variables which associated with employment in nurses, health care providers, and teachers in Iran, only a few studies reflect on-the-job satisfaction and mental health of people working in industrial fields such as Iron and steel industry, because these settings faced with numerous dangers and damaging factors therefore dealing with them is very important.

In other hand the increasing presence of temporary employees in the world economy [14] as well as Iran increases the importance of understanding their mental health and job satisfaction and determining how preventive programs may alter those health and well-being.

A recent study conducted in Petrochemical Company in Iran; which examined occupational stress and mental health of employees before and after privatization; revealed that job stress level was significantly increased 3 months after privatization [15]. In spite of this, compared with research on permanent work arrangements, research in this area is limited. This research investigates and compares general health, occupational and job satisfaction between

permanent and temporary employees in Isfahan Steel Company.

## 2 MATERIALS AND METHOD

### 2.1 Design & Participants

This was a descriptive comparative study designed to compare and assess general health, work-related stress, and job satisfaction between permanent and temporary employees in Isfahan Steel Company. This company as the oldest iron and steel maker of Iran was commissioned in the year 1967 and is one of the three main sources of iron and steel in Iran [16].

According to the safety experts of company the highest level of unpleasant work environment and hard and dangerous duties in Isfahan Steel Company tend to be in the two workstations. All employees of these workstations were requested to volunteer to participate in the study. From a population of 212 employees, 165 employees of different employment status (77 permanent and 88 temporary employees) volunteered to participate; response rate was 77.8%.

Fourteen permanent employees did not complete job satisfaction questionnaires.

This study was approved by the Internal Review Board of the Isfahan Steel Company. The participants in the study were intimated with details of the study and were asked to read and sign a consent form, and were assured of the confidentiality. Participation to study was voluntary; participants were given the opportunity to leave the study if they become uncomfortable. **Demographic data** were measured by a short questionnaire including age, years of education, duration of occupational career, marital status. **General Health** were measured by General Health Questionnaire (GHQ) is a measure of current mental health and as its development by Goldberg in the 1970s it has been widely used in different settings and different cultures [17] Iranian version of the GHQ-28 was used to measure general mental distress. Studies on the validation of the GHQ-28 in Iran revealed that Iranian version of the GHQ-28 has a good structural characteristic and is a reliable and valid instrument that can be used for measuring psychological well being in Iran [18-19]. Participants were asked to indicate whether they had recently experienced a range of common symptoms of distress, which were rated on a 4-point response scale (e.g., not at all to much more than usual). Higher scores on the GHQ reflect greater levels of psychological distress. In present study Cronbach alphas for the GHQ-28 was .82. Occupational stress was measured with the

questionnaire, which was developed for this study, piloted and validated. Despite the fact that there are many valid and reliable general stress assessment questionnaires, researchers developed the questionnaire specifically for industrial workers. Moreover, this questionnaire is shorter than available questionnaires that estimate occupational stress and is thus more expedient for industrial employees. In addition, it contains stressors specifically associated with Iron and Steel workers in developing countries such as Iran.

The validity of this questionnaire was proved by content validity. First, a draft was prepared based on books and articles published on occupational stress and the quality of content was checked and evaluated by panel of experts and then, based on the suggestions, the questionnaire was edited and refined. To determine the reliability of the questionnaire, Cronbach's alphas -coefficient was used. The Cronbach alphas for was .76. This questionnaire contains 32 items. Participants were asked to grade the stressors using a likert scale from 0 (not at all) to 4 (extremely agree). The stress scores were grouped into three groups as follows: normal range, mild maladaptive stress, strong maladaptive stress.

**Job satisfaction** was measured by the Job Descriptive Index (JDI). This instrument can identify five facets of job satisfaction: satisfaction with the work itself, supervisor, coworkers, pay, and promotion [20]. JDI is the most popular device

to measure job satisfaction and has been used widely in numerous studies in various country as well's Iran [21]. In total it has seventy two items, nine or eighteen items per facet. Responses could be yes, no, or not sure. [22] Data were analyzed using version 12 of the Statistical Package for the Social Sciences for Windows (SPSS).

### 3 RESULTS

All employees were full-time shift men. The mean and standard deviation of age in permanent and temporary employees were 35.5, 4.72 and 37.3, 4.77 respectively. Eighty-nine percent of permanent employees and 80.6% of temporary employees were married. The mean and standard deviation of duration of occupational career in permanent and temporary employees were 10.5, 3.53 and 9.3, 5.21 respectively.

The mean and standard deviation of years of education in permanent and temporary employees were 11.2, 2.5 and 10.8, 2 respectively. According to chi-square and independent t test analysis, participants from the two groups were statistically similar in demographic characteristics.

To compare the job satisfaction in permanent and temporary employees, scores of different aspects of satisfaction were grouped into three groups as follows: low satisfaction, intermediate satisfaction and high satisfaction and chi-square test were run. The results of chi-square test on all aspect can be seen in (Table1).

Table1. Distribution of job satisfaction in employees by employment status

	Temporary(n=88)						Permanent(n=63)						p-value
	Low satisfaction		Intermediate satisfaction		High satisfaction		Low satisfaction		Intermediate satisfaction		High satisfaction		
	N	%	N	%	N	%	N	%	N	%	N	%	
<b>Job satisfaction</b>													
work	35	40%	6	7%	47	53%	6	9.5%	10	15.5%	48	75%	.001
supervisor	26	30%	10	11%	52	59%	12	18%	7	10%	47	72%	N.S
pay	70	80%	2	2.2%	16	18%	39	60%	5	7%	22	33	.01
promotion	51	59%	7	8%	29	33%	49	78%	5	8%	9	14%	.02
coworkers	7	8%	8	9%	72	82%	2	3%	11	17%	50	80%	N.S
total	29	33.3%	12	13.8%	46	52.9%	5	7.9%	6	9.5%	52	82.5%	.002

To compare the general health in permanent and temporary employees, according to cut off point of instrument, GHQ scores were grouped into two groups as follows: Healthy and suspected to psychological disorders and to compare the stress

in two groups, the stress scores were grouped into three groups (normal range, mild maladaptive stress, strong maladaptive stress) and chi-square tests were run. The results can be seen in (Table2).

Table2. Distribution of mental health and occupational stress in employees by employment status

	Temporary(n=88)		Permanent(n=75)		p-value
	N	%	N	%	
<b>Occupational stress</b>					
normal stress	27	30.6%	41	54.6%	.006
mild maladaptive stress	45	51%	27	36%	
strong maladaptive stress	16	18.2%	7	9.3%	
<b>General Health</b>					
Healthy	78	87.6%	68	90.7%	N.S
suspected to psychological disorders	11	12.4%	7	9.3%	

#### 4 DISCUSSION

In recent decades, the world faced an economic crisis that exaggerated businesses, private citizens, government agencies, and industrial organizations [22].

To survive the economic crisis, numerous countries as well as Iran adopted new structures of employment status such as temporary work, part-time work, and outsourcing to decline the expenses and reinforce their competitiveness.

Industrial organizations such as Isfahan Steel Company modified their employee forces by reducing the number of permanent employees and increasing the number of temporary employees. The purpose of present research was to study the differences in mental health, occupational stress and job satisfaction, between permanent and temporary employees working in Isfahan Steel Company. The researcher tried his best to follow ethical considerations, some of which will be mentioned here. The participants in the study were intimated with details of the study and were asked to read and sign a consent form, and were assured of the confidentiality. Participation to study was voluntary; participants were given the opportunity to leave the study if they become uncomfortable.

The results point out that permanent employee had significantly higher levels of job satisfaction than did temporary employees. 7.9% of permanent employees and 33.3% of temporary employees had low levels of total job satisfaction. These results are consistent with some studies [23-24] and are inconsistent with some [25].

More detail study revealed that different between permanent and temporary employees was significant in satisfaction with work itself ( $P \leq .001$ ). Temporary workers are filling obligatory to do hard

tasks, most notably reduced control, role stress and limited support. Some studies showed that temporary employees experience less autonomy than permanent employees. Furthermore, their work is often highly monotonous, thus implying few possibilities for skill utilization [26].

Temporary employees have little control over the design, implementation and nature of their work. For example, compared with permanent employees, temporary employees are more likely to hold physically uncomfortable jobs or jobs which other organizational members believe least satisfying in terms of job content or work schedules [27].

Comparison of job satisfaction between permanent and temporary employees showed similarities in the supervision and coworkers subscales; 72% of permanent employees and 59% of temporary employees had high levels of supervision satisfaction; 80% of permanent employees and 59% of temporary employees had high levels of coworker's satisfaction. These results are consistent with studies had been down in nurses [28-29].

As it was predictable, there was significant difference between permanent and temporary employees in the pay subscale. Majority of temporary employees (80%) had low level of pay satisfaction. This finding is consistent with some studies [28-29].

And this is unlike the findings of study by Han in Korea on job satisfaction of nurses.

The data from the British Household Panel Survey, find that temporary employees report lower levels of job satisfaction and are less well-paid than their counterparts in permanent employment [30].

These differences in satisfaction with respect pay scale can be explained by the consideration differential socioeconomic condition in countries.

Pay attention to permanent employee also implied that employees, whether they are permanent or temporary, are dissatisfied with their salary level.

In this study, temporary employees had higher level of occupational stress than did permanent employees. Possible determinants of work stress that have been recognized in permanent employees are intensified in temporary employment arrangements [26][31-32].

Comparison of mental health, found no significant differences between groups according to cut off point of instrument. However, permanent employees' scores were higher than that of temporary employees.

## 5 CONCLUSIONS

To decrease differentiation between permanent and temporary employee; useful strategies should be develop in Iran. Since temporary employees make up substantial percent of workforce through the country, future research are needed for this group of employees. The results of this study also mean that such opportunities and recompense policies related with administrative recognition should be made accessible to the both temporary and permanent employees to manage their workforces more efficiently.

## Research limitations

The focus of the study was employees working at two workstations in Isfahan Steel Company only. Only self-reported measures were used to measure job satisfaction and mental health. Since respondents were from two workstations only so the findings must be generalized to whole employees of company carefully.

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