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## Comparison of Burnout and Job Stress Between Physical Education Employees and Industrial Workers

Mahdiehsadat Taheri<sup>1</sup>, Elham Forouzandeh<sup>2</sup>, Leila Zamani<sup>3</sup>, Zahra Seddighi<sup>4</sup>

<sup>1</sup>Department of physical Education, Yazd Branch, Islamic Azad University, Yazd, Iran

<sup>3</sup>Department of Psychology, Naein Branch, Islamic Azad University, Naein, Iran

<sup>2</sup>Department of Physical Education, Sari Branch, Islamic Azad University, Sari, Iran

<sup>4</sup>Department of Physical Education, Najafabad Branch, Islamic Azad University, Najafabad, Iran

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### ABSTRACT

*Job stress and burnout originate from environmental factors at workplace. Job stress disturbs physical balance, and burnout affects the quality of work and services, which may result in leaving a job, absence, and low morale and responsibility. The present study aims at comparing burnout and job stress between physical education employees and industrial workers. In this regard, 50 employees with physical education offices in Isfahan and 60 employees with Isfahan textile factory participated in the study. None of the participants were foremen or top engineers. To collect the data, a burnout questionnaire and a job stress questionnaire were administered to the participants. Both descriptive and inferential statistics (including independent t test) were run to analyze the data. Statistical analysis was conducted using SPSS software. The results showed that physical education employees suffer higher levels of job stress and burnout comparing with industrial workers.*

**Keywords:** Job stress, burnout, employee, worker.

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### INTRODUCTION

Stress refers to a set of physical responses caused by internal (cognitive) or external (environmental) stimuli. Stress is omnipresent in all aspects of life at different levels of intensity, which may risk an individual's health. The major factors causing stress include: life disturbances, long-term tension, troubles, failures and conflicts [5]. Workplace pressures are widely associated with the individual's health and may even cause physiological and psychological disorders. Generally, job stress originates from workplace pressures so that a set of workplace factors may disturb physical and psychological balance [1].

One of the consequences of severe job stress is burnout. Burnout is a rather new concept which refers to the individual's responses to mental pressures at workplace. Burnout is the result of

consistent stress and is inevitable in human service jobs [1]. All employed individuals are vulnerable to stress and undergo mental pressures in many ways. Career vicissitudes including organizational changes, pay changes, promotion, recruitment or workforce cutback and social change may impose mental pressures upon the individual and expose them to confusion, worry, anxiety and stress [11]. Burnout has been defined as a sense of physical, mental and emotional fatigue (such as a syndrome of emotional exhaustion) as well as a type of decrease in personal skill and competence [12]. Burnout is associated with the individual's career, which may endanger the individual's mental health unless it is resolved [7]. Burnout syndrome involves three main symptoms of emotional fatigue, depersonalization and a sense of powerlessness to do routines [6]. Burnout disturbs the quality of work and services offered by the staff. It may result in leaving a job, absence, and low morale and responsibility. Besides, burnout is associated with fatigue, sleeplessness, diseases, increased drug and alcohol use and familial problems. Also, a high percentage of diseases and emotional strains, stress tolerance and weaknesses relate to burnout. People who suffer from burnout feel exhaustion and fatigue and show cognitive, emotional and behavioral disorders [1].

Job stress and burnout in organizational and workplace environments impose heavy human and financial costs on industrial factories, organizations and offices every year [1]. Research has shown that over 10% of a nation's GDP is dissipated in organizations every year due to stress-induced costs [1]. Ross et al (1998) reported that 4% of business hours are wasted due to stress-induced employee absence, burnout and job dissatisfaction. The imbalance between job demands and personal characteristics can affect the employees' mental health and reduce the efficiency of manpower, production and development. Since differences in work environments may cause different levels of job stress and burnout, the present study was conducted to compare job stress and burnout between industrial workers and physical education employees. Research has shown that office workers suffer from less job stress and burnout comparing with workers [2]. Since physical education employees are involved in executive actions such as planning, holding sports competitions and preparing sports camps, they may be exposed to less burnout and job stress. However, since industrial workers work in noisy environments with circulating shift work, they are vulnerable to higher job stress and burnout [2]. Therefore, the present study aims at comparing job stress and burnout between industrial workers and physical education employees.

## MATERIALS AND METHODS

The method of the present study is descriptive-comparative whereby burnout and job stress are compared between physical education employees and industrial workers.

### Participants

50 employees with physical education offices in Isfahan and 60 workers with Isfahan textile factory volunteered as participants in this study. To collect the data, a burnout questionnaire and a job stress questionnaire were administered to the participants.

### Measurement tools

Job stress questionnaire was used to examine the participants' job stress. Designed to assess workplace stress, the questionnaire consists of 20 items on Likert scale ranging from "Never" (1) to "Always" (2). The reliability of the scale using Cronbach Alpha formula has been estimated to be  $\alpha=0.82$  [1]. Maslach - Jackson Burnout Inventory (1985) was also used to examine the participants' burnout [2]. The inventory consists of 22 items with three subscales of emotional exhaustion, depersonalization, and personal accomplishment. The scale can be administered in two ways. The first procedure is arrange the items on a dimension of frequency which involves

the number of times the individual has experienced burnout in every three subscales. The second procedure refers to the intensity of burnout pertaining to every statement. For the purposes of the present study, the intensity procedure was used. Research has proved the validity and reliability of the inventory. Using Cronbach alpha formula, the reliability of the inventory was calculated to be  $\alpha=0.91$ .

## RESULTS

The results pertaining to the participants' level of education showed that 20% of the physical education employees had diploma, 60% had BSc/BA, and 20% had MA/MSc. The results pertaining to the industrial workers' level of education included: 33.3% diploma, and 66.7% BA/BSc. 40% of the physical education employees were male and 60% were female. 83.3% of the industrial workers were male and 16.7% were female. 85.7% of the physical education employees were married and 14.3% were single. 83.3% of the industrial workers were married and 16.7% were single. Table 1 illustrates descriptive statistics pertaining to the participants' characteristics.

**Table 1. Descriptive statistics of the participants' characteristics**

Group	variables	number	min	max	SD ± Mean
Physical Education Employees	age	50	31	41	36.91±3.96
	work experience	50	7	12	9.23±1.61
Textile workers	age	60	24	38	30±4.54
	work experience	60	1	17	8.69±4.72

As shown in Table 2, there is significant relationship between job stress and the subscales of burnout. That is, high levels of emotional exhaustion, depersonalization and lack of personal accomplishment are associated with high levels of job stress.

**Table 2. The relationship between job stress and subscales of burnout**

Variables	Subscales of burnout	$\alpha$	P
Job stress	Emotional exhaustion	0.95	0.000
	Depersonalization	0.71	0.000
	Lack of personal accomplishment	0.69	0.000

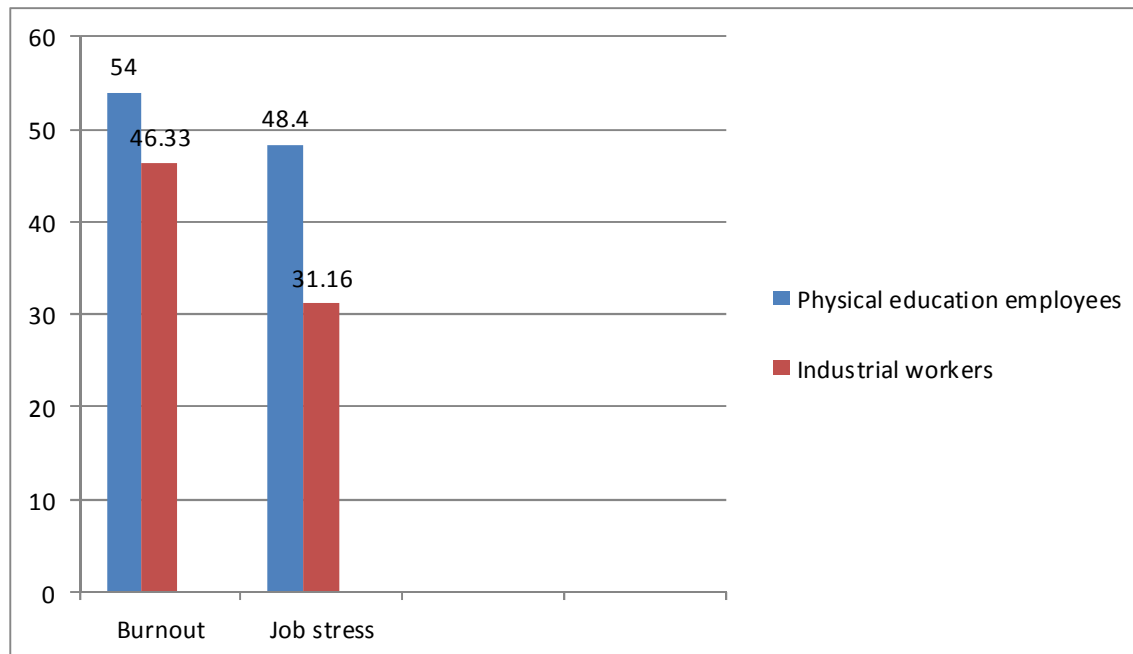
\* significant correlation at  $\alpha < 0.01$

**Table 3. Comparison of mean burnout and its subscales between physical education employees and textile workers**

Variables		Frequency	SD± Mean	Test result
Emotional exhaustion	Employee	50	16.8±4.20	t=11.52
	Worker	60	6.1±5	P=0.000
Depersonalization	Employee	50	12.8±8.29	t=7.84
	Worker	60	21.8±2.93	P=0.000
Personal accomplishment	Employee	50	24.4±6.74	t=4.25
	Worker	60	19.5±5.32	P=0.000
Total (burnout)	Employee	50	54±6.54	t=4.8
	Worker	60	46.33±9.57	P=0.000

The results showed that there is significant difference between physical education employees and textile workers in terms of mean burnout and its subscales (see Table 3).

Figure 1 illustrates mean burnout and job stress among physical education employees and industrial workers.



**Figure 1. Mean burnout and job stress in physical education employees and industrial workers**

## **DISCUSSION AND CONCLUSION**

The present study aimed to compare job stress and burnout between physical education employees and industrial workers. Burnout is a type of mental exhaustion which is associated with mental pressures and workplace stress. Burnout disorder has been witnessed among counselors, teachers, social workers, physicians, and nurses. It is associated with provocative stimuli such as having to deal with too many clients simultaneously, lack of enough time, lack of support or appreciation [10, 14]. The results of the present study showed that industrial workers suffer from less burnout and job stress. Since office clerks are always exposed to heavy pressures of office work and are questioned by top management, they suffer from high workplace stress because top management dissatisfaction with an employee may result in his/her reprimand, punishment and even dismissal. Besides, boring and monotonous office work and bureaucratic rules deprive the employees of their authority, initiative and self-actualization. Therefore, the boring workplace environment reduces job motivation in the employees and makes them vulnerable to severe occupational depression [4]. Anderson and Iwanicki (1984) found a significant negative relationship between self-actualization and burnout in teachers. In addition to accountability to top management, physical education employees have to deal with many clients of different social groups every day, which may cause mental pressure, stress and burnout in them [8]. Despite the present findings, Sa'atchi (2004) and Alavi *et al* (2009) reported that industrial workers suffer from higher burnout and job stress comparing to industrial office clerks. Alavi *et al* (2009) reported that higher levels of job stress and burnout among automotive industry workers may relate to such factors as noisy environment, pollution, circulating shift work, high workload, long hours of physical labor, work delicacy and accuracy, remaining in a

standing position for long, and disturbing lights. Textile work is highly sensitive; however, since textile workers are not hold responsive to top management but their foremen and do not deal with stringent bureaucratic rules, they may not be afflicted by mental pressure and stress and are not vulnerable to high levels of burnout comparing with physical education employees. Stress symptoms exhibit in different ways including reduced work or frequent absence, job change, employee displacement, decreased quality or quantity of products, heavy costs of new recruitments and employment [9]. Therefore, it seems that stress, in any form and by any reason, causes irreparable human, economic, cultural and social complications. On the other hand, burnout results in additional workload and a vicious cycle, which eventually decreases the efficiency and job satisfaction in employees. Therefore, procedures must be employed to reduce job stress and burnout in physical education employees.

## REFERENCES

- [1] A. AbRavan, M.S. thesis, Islamic Azad university, Naeen branch, **2009**.
- [2] S. Alavi, F. JannatiFard, and E. Davoudi, **2006**, 6.
- [3] M. Anderson and E. Iwanicki, *Edu Administ Quart*, **1984**, 20:109-132.
- [4] R. Diaz and A. Zulkaida, Gunadarma University, <http://www.gunadarma.ac.id>, **2007**.
- [5] H. Ganji, Mental health, Arasbaran Publications, **2000**.
- [6] A. Hosseini, Principles of mental health. QodsRazavi Publications, **1999**.
- [7] H. KuchakiRavandi, M.A. thesis, **2004**.
- [8] M.S. Mahdavi, A research project sponsored by the Presidency Center for Women Participation, **2004**.
- [9] C. Maslach, and S.E. Jackson, *Social psychology of health and illness*, **1982**.
- [10] A. Richardson, and M. Martinussen, *J Occupat Organiz Psych*, **2005**, 77.
- [11] S. Robins, Publications of business research and studies, **1995**.
- [12] R. Ross and R.M. Altmayer, Job stress, Organization for industrial management, **1998**.
- [13] M. Sa'atchi, Industries Company, Center for administrative management education in Tehran, **2004**.
- [14] A. Soltani, and E. Rohani, Burnout in industrial organizations, *Tadbir Monthly*, **2000**, 109.
- [15] Sutherland, and Cooper, Understanding stress, 1<sup>st</sup>ed., Chapman and Hall, **1990**.