

The Relationship Between Job Stress and Organizational Commitment in National Olympic and Paralympic Academy

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Abstract: The purpose of this research was to study the relationship between job stress and organizational commitment in National Olympic and Paralympic Academy (NOPA) employees. Statistical population of this research included all employees (full time) of NOPA and statistical sample was equal to the statistical population (n=59). Job stress questionnaire (JSQ) and organizational commitment questionnaire were used to gather the data. The results indicated a negative significant relationship between job stress and organizational commitment, affective commitment and normative commitment, but there was not a significant relationship between job stress and continuance commitment.

Key words: Job stress % Organizational commitment % National Olympic and Paralympic Academy (NOPA)

INTRODUCTION

Human resources often account for a large part of an organization's cost structure in delivering its products and services and any substantial increase in these costs can adversely affect the ongoing viability and profitability of the organization. Job stress is a growing problem that results in substantial costs to individual employees and work organizations around the globe [1]. The overall cost of stress at work has been estimated to be in the range of 20 billion Euros in the European Union and more than 150 billion dollars in US, mainly for health care and treatment costs, absenteeism and turnover [2]. Stress is a word derived from Latin word "Stingere" meaning to draw tight [3]. Stress concept that comes from medicine and physiology was formed by Canoon research (1915) in connection with the physiological responses to stress [4] and in the second half of the twentieth century scholars examined the consequences of stress in clinical and social psychology [5] and that is more than two decades the researchers consider job stress as one of the biggest concerns for organizations at individual and organizational levels [6, 7]. Despite the key words 'occupational stress', work stress and job stress being used in 2,768 scientific articles published during the 1990s, the scientific community has still not reached an agreed position for the meaning and definition of occupational stress. There has been considerable debate,

for example, about whether occupational stress should be defined in terms of the person, the environment, or both [1].

For this study, stress is defined as the experienced discrepancy between the demands of the environment and capacities of the individual [8]. Cartwright and Cooper (1998) divided job stressor factors into three main sections 1) job factors, 2) individual factors, 3) organizational factors [9]. Job factors with specific job duties that make up the job, the environmental work factors and factors related to work schedule include variables such as level of job complexity, job duties diversity, temperature, noise, level of freedom and control that people have on their speed and timing on their job [10]. Individual's stressor factors have been studied more than other levels: role conflict, role ambiguity, volume overload of work, embarrassment changes, the quality of interpersonal relationships, lack of social support and personality type [11]. Those stressor factors that are attributed to organizational factors are cultural and management practicing within the organization, non-participation in decision making, inappropriate and inadequate communication, totalitarian leadership style, organizational policies, insufficient opportunities for advancement, lack of job security and... which play a role in making stress [11, 12]. Job stress with any model needs the signs to recognize [13]. Baiser and Newman (1978) introduced three categories of signs that show the

incidence of job stress: mental symptoms, physical symptoms and behavioral symptoms [14]. Researches show that job environment and job stress can cause mental illness or accelerate the disease process in personnel [13]. Psychological symptoms of stress include job dissatisfaction, depression, anxiety, frustration feelings, isolation and resentment; some of these symptoms are not only considered as a problem, but also may worsen the job stress [14]. Also at the individual level, higher levels of stress at work can have a direct impact on the immune system exacerbating various medical conditions including low bowel syndrome, headaches and musculoskeletal pain [15]. Thus employees that experience high levels of stress face more diseases than other employees so they demand to leave and as a result it is very costly for organizations [16]. Behavioral symptoms are divided into two groups, first group are signs that can be attributed directly to the individuals such as absence from that work, gobble or anorexia, militant behavior against others and general individual problems. Second consequence refers to agency or organization administration including absence from work, to leave a job, increased accidents due to job and lack of productivity [17]. One of behavioral variables which provides useful information about planning, organizing, increasing performance and reducing absences for managers is organizational commitment [18]. Research on commitment to organizations spans over four decades and remains an area of interest to both researchers and practitioners [19]. Organizational commitment is a bond the employee has with his/her organization [20]. Organizational commitment has been defined and measured in several different ways. The various definitions and measures share a common theme in that organizational commitment is considered to be a bond or linking between the individual and the organization [21]. Meyer and Allen (1990) offer a model of the three components of organizational commitment: affective commitment, normative commitment and continuance commitment. Affective commitment is defined as the emotional attachment, identification and involvement an employee has with its organization and goals, continuance commitment: The individual commits to the organization because he/she perceives high costs of losing organizational membership and normative commitment: Is the commitment a person believes he/she has to the organization or his/her feeling of obligation to his/her workplace. They separated two dimensions of

attitudes and behavior commitment and the definitions for each of them and considered the affective and normative commitments in the attitude dimension and continuance commitment in behavioral dimension and said that the three types of commitment are a psychological state “that either characterizes the employee’s relationship with the organization or has the implications to affect whether the employee will continue with the organization” [22]. The study also reviews organizational commitment by the model of Meyer and Allen [22]. Many researchers point to a negative relationship between job stress and job satisfaction [23-25] and a positive relationship between organizational commitment and job satisfaction [26-28]; therefore, a negative relationship between job stress and organizational commitment seems reasonable, but conflicting results in previous researches have obtained. Lee [29], Lambert and Paoline [27], Omolara [30], Boyas and Wind [31] announced a negative relationship between job stress and organizational commitment while Wells *et al.* (2009) study showed a positive relationship between job stress and organizational commitment and a negative relationship between job stress and career commitment [32]. Also Somers [19] showed a significant relationship between job stress and affective commitment and normative commitment but no significant relationship between job stress and continuance commitment. Yaghoubi *et al.* [33] also announced that there is not a significant relationship between organizational commitment and job stress. Having healthy and committed employees is important for any organization and sport organizations are not exceptions. One of the most important sport organizations that is a subordinate of National Olympic Committee (NOC) is National Olympic and Paralympics Academy (NOPA). National Olympic and Paralympics Academy is a scientific and educational research, cultural and professional institute that is active at national and international levels (National Olympic Academy of Association). Considering the tasks of NOPA in relation with athletes, coaches, sport federations, physical education organizations, NOC and other national and international sport associations, NOPA has an important role in developing sport in our country. Considering the conflicting results of previous researches and the fact that the relationship between job stress and organizational commitment is not studied in sport organizations before, this research intends to investigate whether there is a significant relationship between job stress and organizational commitment in National Olympic and Paralympics Academy.

MATERIALS AND METHODS

This research is applicable considering the purpose, descriptive considering the method and correlative considering the type; data collection is environmental and the instrument is questionnaire. The statistical population of this research includes all full-time employees of NOPA in 2009. Out of 59 questionnaires which had been distributed among statistical population, 50 were answered completely (refer rate=0.84). Two instruments were used in this study: job stress questionnaire (JSQ) with 20 questions and the organizational commitment questionnaire (Meyer and Allen 1990) [22]. Demographic information of employees such as age, work record, gender, marital statues and educational degree was examined by a part of questionnaire. For content validity, questionnaires were distributed among 10 sport management experts. In the present study, Cronbach's alpha coefficient was utilized to examine the internal reliability of organizational commitment (0.81), affective commitment (0.85), continuance commitment (0.83), normative commitment (0.79) and for job stress questionnaire was 0.82 indicating a high internal consistency. For statistical analysis of results, descriptive and inferential statistics were used. In the first part, descriptive analysis is presented as mean, standard deviation, percentage and frequency distribution in Tables. In the second part, for the inference results, Pearson correlation coefficient test, Independent t test and ANOVA were used.

RESULTS

Descriptive findings: Academy employees surveys showed that mean age was 29 years and the range age was between 19 and 43 years. The mean of work record was 4.74 years and the range of work record was between 1 and 8 years. The gender status showed that 26 subjects (52%) were single and 24 subjects (48%) were married. Educational level showed that 12 subjects (24%) were undergraduates, 23 subjects (46%) were graduates and 15 subjects (30%) were postgraduates.

The organizational commitment mean is 76.18, affective commitment mean is 26.76, continuance commitment mean is 25.36, normative commitment mean is 26.24 and the mean of job stress is 68.70 (Table 1).

Affective commitment of 78% for employees is at a medium level, normative commitment of 74% for employees is at a medium level, continuance commitment of 94% for employees is at a medium level. Generally 96% of employees have medium organizational commitment and 4% have high organizational commitment and low organizational commitment is not reported. And 32% of employees have a high level of job stress, 60% have a medium level and 8% have a low level of job stress (Table 2).

Inference Findings: The relationship between organizational commitment and job stress showed that job stress had a significant negative correlation with job stress; as well affective commitment and normative

Table 1: Mean and standard deviation of research variables

Minor variables	M	SD
Organizational Commitment	76.18	6.71
Affective Commitment	26.76	3.70
Continuance Commitment	25.36	3.16
Normative Commitment	26.24	4.57
Job Stress	68.70	14.68

Table 2: Frequency and percentage of organizational commitment and job stress in three categories

Categories	Job stress									
	-----		Organizational Commitment		Continuance Commitment		Normative Commitment		Affective Commitment	
	F	P	F	P	F	P	F	P	F	P
Low	4	8%	0	0%	0	0%	1	2%	0	0%
Medium	30	60%	48	96%	47	94%	37	74%	39	78%
High	16	32%	2	4%	3	6%	11	22%	11	22%

Table 3: Correlation matrix between organizational commitment and job stress

	Job Stress	Organizational Commitment	Continuance Commitment	Normative Commitment	Affective Commitment
Affective commitment	- 0.442 (**) 0.001	0.842 (**) 0	0.371 (**) 0.008	0.662 (**) 0	1
Normative commitment	- 0.313 (*) 0.027	0.651 0.000 (**)	0.269 0.059	1	0.662 (**) 0
Continuance commitment	-0.19 0.186	0.668 (**) 0	1	0.269 0.59	0.371 (**) 0.008
Organizational commitment	-0.411 (**) 0.003	1	0.668 (**) 0	0.651 0.000 (**)	0.842 (**) 0
Job stress	1	- 0.411 (**) 0.003	-0.19 0.186	- 0.313 (*) 0.027	- 0.442 (**) 0.001

(*) Correlation is significant at 0.05 and (**) Correlation is significant at 0.01

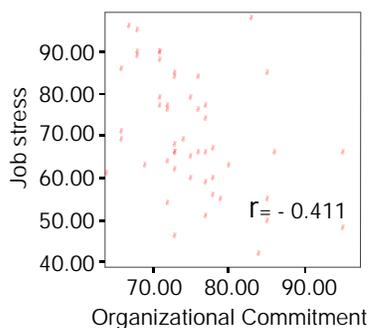


Fig. 1: The negative significant correlation between job stress and organizational commitment

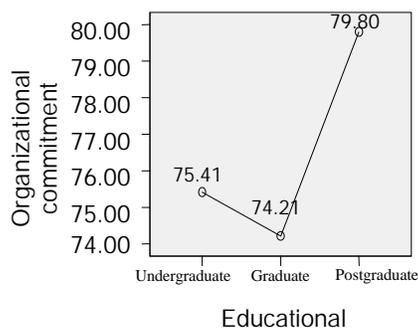


Fig. 2: The means of organizational commitment among employees with different educational levels

Table 4: Correlation between age and work record with job stress and organizational commitment

Variables	Job Stress	Organizational Commitment
Age	0.170 0.237	-0.063 0.664
Work record	0.310 (*) 0.029	-0.208 0.147

(*) Correlation is significant at 0.05

Table 5: The results of comparing organizational commitment among employees with different educational levels

Groups	Mean Difference(I-J)	SD	Sig.
Graduate(I) Postgraduate (J)	-5.58261*	2.20213	0.050
Graduate(I) Undergraduate (J)	-1.19928	2.41718	0.847
Undergraduate(I) Postgraduate (J)	-4.38333	3.01852	0.331

(*) The mean difference is significant at 0.05

commitment had a significant negative correlation with job stress and the correlation between continuance commitment and job stress however was negative but not significant. The results of correlation test for dimensions of organizational commitment suggested that the affective commitment had a significant positive correlation with normative commitment and continuance commitment. But there was not a significant correlation between normative commitment and continuance commitment (Table 3).

Considering the significant and negative relationship between job stress and organizational commitment ($r = -0.411$), an increase in job stress resulted in a decrease in organizational commitment (Fig. 1).

Demographic Factors: The review of the demographic factors determined that there was not significant relationship between age and organizational commitment and between age and job stress. Also the relationship between work record and organizational commitment was not significant but the relationship between work record and job stress was negative and significant (Table 4).

To compare organizational commitment and job stress among male and female employees and married and single ones, t-test was used. The test results indicated that the organizational commitment and job stress between male and female employees and also between single and married employees had no significant difference.

To compare organizational commitment and job stress among employees with different educational levels, ANOVA test was used. Comparing job stress among employees with different educational levels indicated that job stress increased when educational levels promoted, but because the significance level of the F-test was higher than 0.05 ($P > 0.05$), this difference was not significant.

Comparing organizational commitment among employees with different educational levels indicated a significant difference between two groups of employees ($P < 0.05$). Because the homogeneity of variances is not applied, the Games-Howell test was used as a post hoc test to determine those groups whose organizational commitments have significant differences. The Games-Howell test results indicated that the mean of organizational commitment of employees who had postgraduate degree was significantly more than the mean of organizational commitment of employees who had graduate degree (Table 5). However the mean of organizational commitment of employees who had graduate degree was less than employees who had undergraduate degree (Fig. 2) but this difference was not significant.

DISCUSSION AND CONCLUSION

The results indicated a significant and negative relationship between job stress and organizational commitment. As the employees' job stress increases, their commitment to organization decreases and vice versa. The results of this research is consistent with the research results of Lee [29], Lambert and Paoline [20], Omolara [30], Boyas and Wind [31], but inconsistent with the research results of Wells *et al.* [32] and Yaghoubi *et al.* [33]. Considering the importance of organizational commitment, the NOPA officials can promote the organizational commitment of their employees with reducing stressor factors and as a result reduce the costs due to a lack of commitment.

Considering Table 2, because 60% of employees had medium job stress and 32% high job stress, it seems that identifying and reducing stressor factors can decline the adverse effects of job stress and promote the organizational commitment of employees. In review of the relationship between job stress and dimensions of organizational commitment, there was a negative and significant relationship between job stress and affective commitment. The results of this research were consistent with Michael *et al.* [34] but were inconsistent with

Somers *et al.* [19]. As the affective commitment is defined as emotional attachment, identification and involvement an employee has with its organization and goals, job stress increase can lead to a decrease in the employees' sentimental dependence on the organization and it increases the tendency to give up service and as a result absences and leaves imposes heavy expenses on the organization. Also there was a negative and significant relationship between job stress and normative commitment; this result was inconsistent with Somers *et al.* [19]. As the normative commitment was defined as to feel obligation and debt to the organization, job stress increase can decrease the employee's commitment he/she feels to the organization and confronts the organization with problems while it is achieving its goals.

In review of the relation between job stress and continuance commitment although there was a negative relationship, it was not significant; that result was consistent with the result of Yaghoubi *et al.* [33], Michael *et al.* [34] and Somers *et al.* [19]. The result of Table 2 indicated that NOPA employees reported a low level of continuance commitment and 94% of employees had medium continuance commitment. As there is not any significant relationship between job stress and continuance commitment, it is necessary to study the related and effective factors of the employee's continuance commitment in future researches so that the employees' continuance commitment can rise. In review of the relation of demographic factors with job stress and organizational commitment, there was not a significant relationship between age and work record to organizational commitment. In addition, there was not a significant relationship between work record and organizational commitment but there was a positive and significant relationship between work record and job stress. It means that job stress will increase with an increase in work record of employees. Further, there was no significant difference between male and female and single and married employees in organizational commitment and job stress. When job stress was compared among employees with different educational levels, a significant difference was not observed but the organizational commitment mean of employees who had postgraduate degree was significantly more than employees who had graduate degree. Salami [35] showed a significant relationship between age, marital status and educational levels to organizational commitment, but he did not find a significant relationship between gender and

organizational commitment. Lambert *et al.* [20] found no significant relationship between age, gender and educational levels to job stress and organizational commitment in a research. Boyas and Wind [31] also realized that there was not a significant relationship between age, marital status and education levels to job stress. National Olympic Committee makes a contract with a private company named Investing Company of National Olympic Committee every year to absorb more than 70% of NOPA employees (contractive employees). Regarding annual contracts this private company makes with the employees and also neglecting the years of work record and minor effect of the education on the job contracts, it is forecast that some parts of the Academy employees' job stress is affected by the above mentioned issues. Therefore, it seems that the negative and significant relationship between the years of work record and job stress is affected by the employees' employment procedures and neglecting their work record background in the contracts with the company. In addition, employees with postgraduate degree enjoyed higher organizational commitment than employees with undergraduate degrees, perhaps because employees who have postgraduate degrees often directly contract with the National Olympic Committee while the majority of employees with graduate degrees are in contract with Investment Company and how they contract probably results in a significant decrease in their organizational commitment. The results of this research suggest that the National Olympic Committee should review its contract with this company or reduce the number of employees who signed contracts with the company if possible and contract with employees directly or reward them by seasonal payment to decrease the job stress of employees and improve their organizational commitment.

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