

# The effectiveness of instructing hardiness factors on occupational burnout among the personal of the Olympic (using canonical correlation analysis)

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**ABSTRACT:** The purpose of this research is the effectiveness of instructing hardiness factors (ie commitment, challenge and control) on occupational burn out (affective fatigue, personal performance, personality metamorphosis and occupational involvement) of busy personnel of the Olympic national committee of Islamic Republic of Iran in (2013-2014). This research is an experimental project and its statistical universe include all the mentioned personnel in Olympic national committee with 117 subjects. 50 subjects of the personnel that took a higher score of cut-off point at occupational burn out test, randomly, they divide to two groups of 25 subjects; one group are under the hardiness instruction and another group are on expectation list (control group). Findings of research showed that: after instructing hardiness factors. The variables rate of affective fatigue and personality metamorphosis of occupational burn out factors on the frequency, intensity scales have decreased and the variables rate of personal performance and involvement involvement have increased. The hardiness factors (commitment, challenge and control) have an inversed relationship with the affective fatigue factors and personality metamorphosis on the frequency and intensity scales and they have a direct relationship with the personal performance and occupational involvement factors. In order to explain the relationships among hardiness factors with occupational fatigue, it is used of the canonical correlation analysis; results showed only the two first and second canonical correlations on the frequency and intensity scales were 5% meaningful on a significance level.

**Key words:** hardiness, occupational burn out, canonical correlation analysis

## INTRODUCTION

In contemporary world that is the world of organizations, human force as the most valuable organizational resources is the pivot of the organizational approaches and activities and it has a main role to promote the objects and ideals of organization. Human resources give sense to organization and they pave the grounds to fulfill the organization objects (Mousavi Vaez, 2007).

Hardiness is one the personality traits that it treats as a factor for promoting health (Kobasa, 1979). It looks that hardliners have a special intrinsic attitude. This attitude helps them to use a particular method in facing with the problems of life and their associates. Hard liners generally see the events of life interesting, various, instructive and challenging.

They consider the events of life as realistic or a kind of generosity; to the same reason, they are more optimistic towards the whole events of life (Zang, 2010).

Syndrome burn out happen among the personnel as a result of sentimental wear out, personality loss and personal problems (Salahian et al, 2012). Occupational burn out is one of the results of different stresses that experience and it appears as a physical symptoms (headache, stomach ulcer), mental symptoms (depression & anger) and behavioral symptoms (work drop out & absence).

Faber believe: occupational bum out is a state such as the physical, affective and mental fatigue that causes because of long-term and direct facing with people; this condition is intolerable from affective view point (Mohammdi et al, 2005). The purpose of this research is response to this problem that can one disappear the occupational burn out at organizations by instructing hardiness as one of the personality factors or at least

adjust it? At this case that is higher rate of the hardiness is under the effectiveness of instructing or not or higher rate of the hardiness can cause to improve occupational burnout?

### METHODOLOGY

Statistical universe, sample and method to conduct the research the statistical universe of this research include all the busy personnel of the Olympic national committee of Islamic Republic of Iran in 2013-2014; they are 117 subjects. So subjects of the personnel that took a higher score of cut-off point at occupational burn out test, randomly, they divide to two groups of 25 subjects; one group are under the hardiness instruction and another group are on the expectation list (control group).

This research is an experimental project from pretest- post-test project type with control group that is comprise of two subject groups and both groups assess two times. The first measurement conducts with a pretest and the second measurement after using the independent variable for experimental group conducts with a post- test on both control and experiment group; groups are randomly selected and having used random sampling method, half of subjects are placed at the experiment group and the rest are placed at the control group. Having used the random sampling, both groups are similar and measuring the dependent variable does at the same time and under the same condition for both of them. After conducting the test, 50 subjects that took a higher score of the cut-off point, randomly, they divide to two groups of 25 subjects; one group are under the hardiness instruction and another group are on expectation list. The experimental group are under the hardiness instructing in the course of 12 sessions; it's time will be 90 minutes for each session. At the end of instruction course, both groups are under the post-test. The occupational burn out questionnaire is a questionnaire that has innovated by meslesh, psychologist and specialist at the occupational burn out. This 48 question questionnaire has been drawn up by 9 degree scale. On Muhammadian's research, the validity of the test is acquired by halving method; it was equal to 70%. The hardiness questionnaire is a 51 question test. Questions calculate for three subscales that is commitment, control and challenge on likert's 4 degrees measures from zero score to three score. In addition to these three subscales, from the score grand total of the subscales, a total score gains for hardiness. It is used of the canonical correlation analysis method to analyze the data. Canonical correlation analysis is a technique for extracting the common traits of two variable sets, so that a linear permutation of two variable sets is considered in such a way till their correlation coefficient maximize. Before conducting the canonical correlation analysis, at first it's presuppositions, that is having liner relationship, the normality of the data and the correlation among data of factors will investigate. All the statistical analysis executed via SPSS and SAS soft wares:

### Reserch Findongs

The relationships of each of the hardiness factors with each of the occupational burn out factors are investigated. It is possible that between these two phenomenons have a relationship of direct quantitative type of inversed quantitative. This problem is investigated by the canonical correlation analysis method. In table (1), it has mentioned the kernel's focal correlation with amount of the test statistic.

Table1. canonical correlations and test statistic

Variance percent	p-value	Statistic vaule ( $\phi_0^2$ )	rate of correlation ( $R_c^2$ )	scale	Variables pair
55/87	.00009	.5429	.7121	frequency	1 <sup>st</sup> correlation
53/68	.0010	.5311	.7016	intensity	2 <sup>nd</sup> correlation
27/37	.0159	.7351	.6875	frequency	
24/62	.0174	.7021	.6656	intensity	

In table (1) observe that only two first and second canonical correlations on the intensity and frequency scales had been meaningful on a significance level; whereas, two focal variable pairs on 83.24% frequency scale and on 78.30% intensity scale explain variations. The test statistic for determining the meaningfulness of the focal variables is collectively executed by Wilkie Bartlett Lambda test; comparing the amount of the test statistic ( $\phi_0^2$ ) with the chi-square distribution on two first and second correlations for the intensity and frequency scales showed that these amounts 5% meaningful on a significance level. In order to gain the explanations of the first and second canonical correlations it's necessary that the focal coefficients of the canonical variables pair have been mentioned.

Table2. correlations, sample among indexes and 1<sup>st</sup> and 2<sup>nd</sup> canonical variable

2nd canonical variable		1 <sup>st</sup> canonical variable		Occupational burn out factors	2nd canonical variable		1 <sup>st</sup> canonical variable		Hardiness factors
Scale Intensity	Frequency	scale intensity	frequency		scale intensity	frequency	scale intensity	frequency	
0.5928	0.2635	0.2662	0.2251	Affective fatigue	0.2562	0.2616	0.4125	0.4616	commitment challenge
-0.3405	-0.3265	-0.2804	-0.2845	Personal performance	-0.2564	-0.2684	-0.3251	-0.3404	
-0.4818	-0.4818	-0.2518	-0.2528	Personality metamorphosis	0.4852	0.4818	0.2563	-0.2818	control
0.2415	0.2325	0.4609	0.4265	Occupational involvement					

In table (2) observe that on the intensity and frequency scales only the commitment factor among hardiness factors have the strongest correlations with the first focal variable and the control factor among hardiness factors have the strongest correlations with the second canonical variable. In the same manner, table (2) showed that on the intensity and frequency sales only the job involvement factor among the occupational burn out factors have the strongest correlation with the first canonical variable and the personality metamorphosis among the occupational burn out factors have the strongest correlation with the second canonical variable.

### CONCLUSION

Findings of this research showed: After instructing the hardiness factors, the variables rate of affective fatigue and personality metamorphosis of occupational burn out factors on the frequency, intensity and reduction scales decreased and the variables rate of personal performance and job involvement have increased.

The main hypothesis of this research was that is there a meaningful relationship among hardiness factors and occupational burn or not? Findings of the canonical correlation analysis tests indicate that the hardiness factors (commitment, challenge and control) have an inversed relationship with affective fatigue factors and personality metamorphosis on the intensity and frequency scales and they have a direct relationship with the personal performance factors and job involvement. Also, the control factors have the strongest correlation with the personality metamorphosis on the intensity and frequency scale and the challenge factor have the weakest correlation with the job involvement on the intensity and frequency scale. Findings of this research correspond with the predictions of scholar and many performed studies and with the consequences and findings of the previous researches, too (Rudovalt & Aguestedotir, 1984; Zakin et al, 1999; Medi & Hitor, 1999; Villiams et al, 1992; Medi, 1997). It's possible that the control have a lot of importance in the society of Iran; because in the cultural tradition ruling on the Iran's society, predominantly, the powers limit of men is high. If they fell that the events of life including the failure and success is in their control domain, probably, they will show a more resistance against the life's stresses. In other words, having enjoyed of control factor, it can make men stronger in the face of tendency to the occupational burn out. It's worthy of attention that feeling to commitment towards the personal objects have been remarkably importance for men. Perhaps, the above finding is true merely as regards the personnel and it's acquired results differ in the others. How ever, it should be note that. This research have been conducted on a group of Iran's society of Iran that comprise a population of different cultural histories, generalizing these kind of findings need to take care and much consideration.

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