The effectiveness of instructing hardiness components on anxiety level of National Olympic Committee personnel in Islamic Republic of Iran

Loghman Keshavarz[1], Morteza Rezaeesoufi[1], Abolfazl Farahani[1], Hematolah Bastami[1*]

1. Department of Sport Management, Payam-e-Noor University, Iran

Corresponding author: Tel: +98 8412221052; fax: +98 8412231053
Address: Department of Sport Management, Payam-e-Noor University, Ilam, Iran
E-mail: hemmat_bastami@yahoo.com
Received 26/8/2014; revised 01/10/2014; accepted 05/10/2014

Abstract

Introduction: The aim of this research was to determine the effectiveness of instructing hardiness components on anxiety level of National Olympic Committee personnel.
Materials and methods: The study was a semi-experimental research. The statistical population included all the personnel of the National Olympic Committee of Islamic Republic of Iran employed in 2013-2014 who contained 117 individuals. Simple random sampling method was used to recruit 25 participants (15 males and 10 females) for the study. The research tools used in the study were hardiness and Ketel's anxiety questionnaires. Data were analyzed through SPSS software using independent t-test and multivariate regression.
Results: Findings showed that the mean of anxiety changed before and after instructing hardiness components because all the meaningful values were less than 0.05 of significance level. In a word, instructing hardiness component influenced anxiety.
Conclusion: Results of this research indicated that hardiness predicts the changes related to the hardiness problems to a large extent. Therefore, it explains the negative relation of hardiness with anxiety. It means that this technique reduces anxiety and increases the efficiency and effectiveness in the organization as much as individuals learn the technique to oppose the stress by instructing hardiness. These results represent the important role of instructing hardiness to decline work anxiety.

Keywords: Hardiness, anxiety, Olympic Committee personnel

Introduction

Today, we experience stress more than the past. This state endangers the mental health of people and causes mental problems in humans. Living in this industrial world has put human relations at risk since human relations have diminished to some extent and social supports have faded. Moreover, it induces the individuals to make a ceaseless effort to earn their livelihood and disregard many of their desires and innate needs (1). In spite of technical developments, we live in a time facing disorders such as depression, anxiety and stress as prevalent diseases of the century (2). Finding relaxation and confidence and avoiding depression and anxiety are the most essential innate human needs and this has been a part of human requirements since long ago. On the other hand, mental health is a social need because the ideal performance of society involves possessing individuals to have their health and mental health in an ideal condition. By the same token, one of the objectives and plans of social systems is to promote the welfare and well-being level of society. To have preventive planning and promote society's health, it is necessary at first to present an image of the health condition of society under study.

[Downloaded from jbrms.medilam.ac.ir on 2026-11-09]

It is obvious that any effort to attain health and mental relaxation, as a personal need and social necessity, involves thorough familiarity with the sense of health and the how of measurement (3).

Hardiness allows a person to face life stressful events in a way that they would have the least effect on his life; that is, a person with such a characteristic treats life stressful events as worthless and trivial events (4).

It seems as if hardliners have a special internal attitude. Having this attitude allows them to use a special method to encounter with life problems. Hardliners generally see the events of life as interesting, various, instructive and challenging events. They consider life events as realistic or a kind of generosity. For the same reason, they are more optimistic toward all events of life. Probably, it is this same optimism that causes hardliners to be stronger against unpleasant and unexpected events and diseases (5).

In a research on 300 security guard officers in the USA army, it was found that hardiness has a positive relation with the performance of officers in the course of military operations and it decreases the destructive effect on performance. In this research, the role of buffering hardiness factor against stress has been confirmed. In another similar research, the role of hardiness buffer in relation to stress and diseases has been confirmed (4, 5). Findings indicated that hardiness is a shield against stress in different life situations (1, 2).

Anxiety is an unpleasant mental feeling, apprehension, uneasiness, tension and an indefinite oppression that is along with one or several physical symptoms such as thorax tightness, palpitation, perspiration, headache and restlessness (6).

The occupational anxiety can be considered as the result of gathering up stressful factors in job-related situations and most individuals agree that it is stressful. Moreover, occupational stress, as an interaction between job conditions and the personal traits of an employee, and its related pressures is a too much demand at work. These pressures are significant for an individual to be able to cope (7).

Nowadays, employees face the continual increasing of occupational duties at work while they spend a lot of time to work and this bears too much pressure on them. The personnel of National Olympic Committee are not excluded in this respect. These days, employees' expectations inside and outside the social, cultural and even political system has excessively increased and they are constantly under working pressure. This pressure might probably influence them more and more and endangers their personal health and relaxation. It affected them with stress and because of these pressures, the initial power and energy of this powerful force is decreased after a time. For this same reason, their efficiency and effectiveness may be decreased. If this stress continues, it will bring about fatigue and burnout (8).

What is the possible effect of hardiness on mental health in increasing or decreasing anxiety? The main aim of this research was to find a response to this question and this issue has not been considered by previous studies. On this basis, the main hypothesis of this research was studied and tested "the effectiveness of instructing hardiness components on amount of anxiety". The type of relation between hardiness and its components with anxiety is inversely predicted in this research.

Materials and methods

The statistical population of this research included all the personnel of National Olympic Committee of the Islamic Republic of Iran employed in 2013-2014; they were 117 individuals. 50 individuals of the personnel that took a higher score of cut-off point at anxiety test were randomly divided into two groups of 25.One group receives the hardiness instruction (experimental group) and another is on the expectation list (control group).

[Downloaded from jbrms.medilam.ac.ir on 2026-11-09]

This is a semi-experimental research with pretest- post-test design with control group comprised of two subject groups and both groups were assessed two times. The first measurement was conducted with a pretest and the second measurement after using the independent variable for experimental group conducted with a post-test on both control and experiment groups. The groups were randomly selected through random sampling method. Half of subjects were placed in the experimental group and the rest were placed in the control group. Using the random sampling, both groups were similar and measuring the dependent variable was done at the same time and under the same condition for both of them. The experimental groups were under the hardiness instruction in the course of 12 sessions; the time was 90 minutes for each session. At the end of the instruction course, both groups received the post-test.

Research tools

Hardiness questionnaire: Kobasa (5) formed a scale to survey personal attitudes. Medi (6) has named this scale "third generation of hardiness scales". The researchers working on the scale were promising and the positive and negative items have a better balance in this scale. This questionnaire is a test with 50 questions.

Cronbach's alpha coefficient for the commitment component is 95%, for control component it is 94% and for challenge component is 91% (6). In addition to three sub-scales, a total score obtains for hardiness of the grand total score of sub-scales.

The anxiety questionnaire used in the present research has been shown in table 1.

Table 1. Anxiety questionnaire used in the present study.

Session	Topic	Objectives
1	Be in straitened circumstances	Familiarity with the sense of stress- familiarity with types of stress-have a different sense of stress
2	The difference of attitude	Stress resources- intervention logic
3	Perceive the event in a different manner	Have a different sense of time-discuss about stress and the sense of hardiness
4	Changing attitude	Recognition of inferior thoughts of stress-thoughts classification-thought test
5	Changing attitude	Change thinking-self speech and its types-to conduct self-speech
6	Either swim or sink	The role of opponent-thought, effort and challenge- have been put under pressure and the recognition of thoughts-opponent making
7	To keep up a relationship	Tension-reduction-imagery and peaceful place
8	Reinforcing social network	Organizing the group of friends-kinds of friends
9	Assertive training	The technique for saying no- the technique to express emotion
10	The role of nutrition	Healthy nutrition-introducing the stressful foods- introducing the relaxant foods
11	The role of exercise	The role of exercise on health-a program for regular exercise

[Downloaded from jbrms.medilam.ac.ir on 2026-11-09]

In this research, anxiety was determined by a score that a person obtained in response to 40 questions of Ketal's anxiety questionnaire. In this test, a scale between 0-80 ascertains that 80 is the maximum of anxiety and zero is the cause of no anxiety. Total scores of the first 20 questions indicate that anxiety is concealed and covered and total scores of the second 20 questions indicate open anxiety. This scale was normalized by the public prosecutor and his colleagues in the gathering of Iranian students in 1989. In this normalization, a number of 894 subjects (students) have been assessed. By a renewed performance, 70% validity has been acquired. These materials have the differentiation-worthy between the disturbed and normal subjects (1). Data were analysed by SPSS software using independent t-test and multi-variate regression.

The methods of opposing stress and hardiness techniques were instructed to the subjects of the experiment group based on the instructional protocol of Kobasa and Medi in the course of 12 sessions, 90 minutes (three sessions per week) and control group was placed on the expectation list.

Results

According to table 2, it is observed that after instruction, the amount of hardiness components (commitment, challenge and control) have increased. On the contrary, the hardiness components and degree of anxiety reduced after instructing.

Table 2. Mean distribution of score (as mean ± SD)before and after instructing hardiness components in this research.

Hardiness	Commitment	Before instruction	18.76± 7.23
		After instruction	19.16 ± 8.71
	Challenge	Before instruction	24.76 ± 6.04
		After instruction	25.52 ± 6.24
	Control	Before instruction	23.16 ± 7.03
		after instruction	24.96 ± 6.49
Anxiety		Before instruction	37.20 ± 7.22
		After instruction	34.84 ± 10.51

25 subjects were studied in each group.

Kolomogoroff-Smirnoff test was used in mean distribution of hardiness components before and after instruction to determine the normality of data obtained from the distribution of variables of this research. Results of table 3 indicated that the significance level of all components were over 5%; therefore, wecan say with 95% confidence thatdistribution of these variables is normal and therefore, the parametric tests can be used. Is there a meaningful relationship between the hardiness components and anxiety? Pearson correlation coefficient is used to analyze question and the result of study was presented in table 4. Table 4 indicates that there is a meaningful and negative correlation between hardiness components (commitment, challenge, and control) and anxiety because all the meaningful values are less than 25% meaningful level. Consequently, there is an inverse relationship between hardiness components (commitment, challenge, and control) and anxiety. In other words, the more amounts of hardiness components

[Downloaded from jbrms.medilam.ac.ir on 2026-11-09]

(commitment, challenge, control) increase or decrease, the more amounts of anxiety decreases or increases. Moreover, it is observed in table 3 that the challenge components of hardiness components have the greatest amount of correlation with anxiety. It seems as if instructing hardiness components has an influence on the anxiety of employees.

Table 3. Results of the correlation analysis between the hardiness components and anxiety in the final test (post- test).

Variable	**Hardiness components**		
	Commitment	Challenge	Control
Anxiety	-0.53 (0.00)	-0.67(0.00)	-0.54(0.02)

To analyze theory, at first, using t-test in pairs (dependent) sample examines the effectiveness of hardiness components on anxiety of personnel and its results have been presented in table 4.

Table 4. Results of t-test in pairs (dependent) sample in effect of instructing hardiness component on personnel's anxiety.

Elements	t value	df	P value	Difference
Anxiety	3.217	24	0.005	-2.360

Table 4 indicates that the mean anxiety of personnel before and after instructing hardiness components has changed because the meaningful value is less than 25% meaningful level. In sum, instructing hardiness components has an influence on the anxiety of personnel. With regard to negative mean difference of the amount of anxiety, it is concluded that instructing hardiness components has an influence on decreasing the anxiety of personnel.

Discussion and Conclusion

The aim of this research was to examine the effectiveness of instructing hardiness components on amount of anxiety. Findings of this research indicated that there was an inverse relationship between hardiness and its triple components with anxiety. These findings are explained in terms of some possibilities: Hardliners consider stressful conditions less threatening and more controllable in comparison with their counterparts that have little hardiness. On the other hand, hardiness acts as a shield against the stressful conditions of life. The less threat feeling from work environment and feeling more control on the conditions allows an individual to face the challenging situations with relaxation and confidence (3).

The challenge enables hardliner to consider the unpleasant events as a chance for learning not a threat for security; all these aspects cause prevention or shorten the time of negative consequences of stressful events. Hardliners feel a sense of responsibility towards what they are doing and devote themselves to their activities. These individuals believe in the importance and value of their activities and they can find a meaning for what they are doing. They trust in their abilities for changing life experiences in a interesting and meaningful direction; consequently, instead of escaping the problems of life, they completely involve in most of its aspects such as job, family and interpersonal relations (9). In facing with stressful situations, these characteristics cause the hardliner to solve the problem with testing different solutions instead of suspense and perplexity.

The obtained results concerning the relation of hardiness instruction with amount of anxiety and its analysis indicated that the condition of this variable before instruction is acceptable but contemplative in a manner that neglecting it and making no effort to enable human forces can put it in a difficult state. These results are important in decreasing productivity and then losing the power of competition of the National Olympic Committee in a competitive environment; because the biggest advantage of being competitive in successful organizations in this environment is enjoying powerful and

[Downloaded from jbrms.medilam.ac.ir on 2026-11-09]

normal human forces. Therefore, instructing hardiness techniques improves challenge, commitment and control of individuals in facing with stressful events and they can learn these techniques by instruction. Moreover, instructing these techniques decreases stress and prevents from anxiety among employees so that individuals consider the situations less stressful and this makes them without anxiety.

Beliefs and feedbacks of a hardliner can have a protective role for him because they reduce the stressfulness trait of events and consequently resolve the effect of stressful factors on mental health. Instructing hardiness via this mechanism increases mental health. One of the components of mental health is opposing anxiety. On this basis, it is explained that there is a negative relationship between hardiness and anxiety that is as long as individuals learn the technique to oppose to stress by instructing hardiness. This personnel skill reduces anxiety and increases efficiency and effectiveness in the organization.

Results of this research indicated that hardiness largely predicts changes concerning the problems of anxiety. On this basis, it can refer to two categories of practical and theoretical consequences in this research. On the practical area and especially clinical, providing the instructional programs on behavioral, cognitive and affective skills can simultaneously have an influence on hardiness traits and reinforce them. These programs can be infused to the body of available intervention programs in the field of therapies based on the interpersonal relations and increase their efficiency. On the theoretical area, findings of this research can confirm both current theories related to hardiness and anxiety of some aspects and propound new questions and theories regarding the relation of hardiness dimensions with anxiety problems. In this research the researchers were facing some difficulties and obstacles such as disinclination of personnel to fill in questionnaire and fill some questionnaires hurriedly, distrust of subjects to apply the obtained results of research and disregarding and insignificance of the culture to put emphasis on matters of occupational psychology including inattention to hardiness and anxiety. At the end, it is necessary to propose scholars together with study explore and do research on the health and personality by this questionnaire, search for discovering another new resource to reduce anxiety and increase health and find out the other ones as hardiness be protection against anxiety; in a word, they are planning to extend this theory.

Providing brochure, book and lectures included the trait of hardiness as an adaptable trait and immunizing mental diseases and instructing it as a determinant of mental health by professors and the executive managers of sport organizations are among the proposals of this research.

References

1. Salehi-Nezhad MA, Besharat MA. Relations of resilience and hardiness with sport achievement and mental health in a sample of athletes. Proc Soc Behav Sci. 2010; 5 (1); 757-63.
2. Aghaei A, Hasanzadeh R, Mahdad A, Atashpuor SH. Occupational stress and mental health of employees of a petrochemical company before and after privatization. Int J Occup Environ Med. 2010; 1(2):75-80.
3. Britt TW, Adler AB, Bartone PT. Deriving benefits from stressful events: the role of engagement in meaningful work and hardiness. J Occup Health Psychol. 2001; 6(1):53-63.

[Downloaded from jbrms.medilam.ac.ir on 2026-11-09]

4. Kobasa SC. Stressful life events, personality, and health: an inquiry into hardiness. J Pers Soc Psychol. 1979; 37(1):1-11.
5. Kobasa SC, Puccetti MC. Personality and social resources in stress resistance. J Pers Soc Psychol. 1983; 45(4):839-50.
6. Maddi SR. Relevance of hardiness assessment and training to the military context. Milit Psychol. 2007; 19 (1):61-70.
7. Finch TL, Bamford C, Deary V, Sabin N, Parry SW. Making sense of a cognitive behavioural therapy intervention for fear of falling: qualitative study of intervention development. BMC Health Serv Res. 2014; 14(3):436-42.
8. Williams PG, Wiebe DJ, Smith TW. Coping processes as mediators of the relationship between hardiness and health. J Behav Med. 1992; 15(3):237-55.
9. Chennoufi L, Ellouze F, Cherif W, Mersni M, M'rad MF. [Stress and burnout among Tunisian teachers]. Encephale. 2012; 38(6):480-7.
10. Wang Y, Ramos A, Wu H, Liu L, Yang X, Wang J, Wang L. Relationship between occupational stress and burnout among Chinese teachers: a cross-sectional survey in Liaoning, China. Int Arch Occup Environ Health. 2014; 5(2):123-8.
11. Wasuida N. The relationship among organizational commitment, self-efficacy and businesses performance: an empirical study of hotel businesses in Thailand. 2012; 12(2):421-8.

[Downloaded from jbrms.medilam.ac.ir on 2026-11-09]