

## **Effect of Psychological Hardiness Training on Mental Health of Students**

**Jahangir Kalantar**

Scientific-applied university of Khuzestan prisons, Iran

**Leyla Khedri**

Azad University of Hamadan, Iran

**Ali Nikbakht**

Hormozgan University, Iran

**Mehdi Motvalian**

Mazandaran University, Iran

**DOI Link:** <http://dx.doi.org/10.6007/IJARBSS/v3-i2/100>

**Published Date:** 11 February 2013

### **Abstract**

Mental health is one of the most important components of life (Richards, Campania, Muse-Burke, 2010), a situation which in turn is mainly determined by personality characteristics. Whenever the construct, mental health, is threatened, all facets of life, personal, family, social, will be disturbed. However, people are not the same in terms of their reaction to daily life problems and one of the effective variables in this regard is psychological hardiness.

According to Kobasa (1979), hardiness, a personality style, is a set of beliefs about self and the world. It has three components, commitment, control and challenge. The first component, commitment, is defined as a tendency to being involved in daily life activities and an internal interest and curiosity around world including society, things as well as people. The second one, control, is defined as a tendency to believe and behave to effect on the events which occur around the person. The last one, challenge, is defined as a belief to change and avoid of stagnation which in turn can lead to personal growth or a threat to security.

Maddi(2004) viewed hardiness as a construct with the three mentioned components or attitudes that together make people able to turn stressful situations from potential threats into opportunities. However, Bartone (2006) defines hardiness as something more global than mere attitudes. He conceives of hardiness as a broad personality style or generalized mode of functioning that includes cognitive, emotional, and behavioural qualities.

Mental health is defined as a state of well-being from psychological viewpoint, or on other side absence of a mental disorder. It can also being defined as an ability to express personal emotions and successful adaptation to a broad range of demands. People with normal mental health realise their abilities, can cope with daily stressors, work productively and effectively, and being able to contribute in their social life of the society.

As there is an obvious relationship between psychological situation from one side and belief system of people on the other side, this is valuable to know the system as it can promote mental health (Dix, 2006).

### **Literature Review**

Kobasa (1979) found that people who are high in the hardiness construct had also fewer symptoms of psychological problems in terms of mental health. The concept was elaborated by other researches such as Kobasa, Maddi, & Zola, (1983), Kobasa, & Puccetti, (1983), Maddi, (2004). Klag & Bradley (2004) reported a strong relationship between stressful daily experiences and mental health problems. In this study hardiness as an intervening variable was assessed. Nishizaka (2002) in a study found having high score in hardiness is a valid predictor of efficacy for teachers of kindergarten. The teachers who were high in terms of hardiness also showed a better function with respect to indexes of mental health, anxiety, depression as well as physical complaints. Another variable, experienced stress was lower among the group with high scores in hardiness. Jimenez, Natera, Munoz, & Benadero (2006) reported hardy personality as a moderator of burnout and its related symptoms such as depression, anxiety as well as physical problems among firefighters. Bartone (2009) examined moderating effect of hardiness on experienced stress among students and health problems among the group. Sinclair & Tetrick (2000) found hardy personality plays a buffering role to experience stress and appearing symptoms such as anxiety and physical signs of stress. Soderstrom, Dolbier, Leiferman, & Steinhardt, (2000) reported that there is a significant relationship between hardiness from one side and perceived symptoms of mental health problems on other side.

### **Methodology**

#### **Statistical community and sampling**

Statistical community in this study encompassed all male students of Scientific-Applied University of Khuzestan during 2011. Among the group 120 students were selected randomly. The group, then, filled a hardiness questionnaire. The students sorted with respect to their scores in the test and 44 people with the least scores were selected. A socio-economic status test was answered by the group and the students were matched according to their scores in the test. Finally, the subjects were assigned to the groups, experimental and control, randomly.

#### **Instrumentation**

Two questionnaires of psychological hardiness and SCL-90-R used to assess the variables of hardiness as well as mental health.

### Psychological hardiness test

This questionnaire has been made by Najarian and Kiamarsi (1997). This is a self-report test with 27 items. The researchers reported the test validity and reliability .82 and .91 respectively. The reliability coefficients for the test and its subscales were, .93, .85, .80 and .75 for the test and challenge, control and commitment respectively.

### SCL-90-R

The test has 90 items to assess psychological symptoms based on self-report. It was made by Derogotis and Savitz (2000). There are 9 subscales in the test, however only three of them were applied in this study, physical complaints, depression and anxiety. Concurrent validity of the test with MMPI for the overall score was .73, the value for adolescents stress questionnaire was reported .95 (Zarifian, 2004). Reliability coefficients in this study were achieved as .96, .92, .84, .92 for total score, physical complaints, depression and anxiety respectively.

### Statistical method and research design

An experimental design with pre and post tests was applied. Furthermore there was an intervention for the experimental group; however, no treatment for the control group was used.

### Intervention

Intervention included 9 sessions each lasted for an hour in weekly order. During the sessions the hardiness and its components was defined to the participants. In each session a task about the challenge, control and/or commitment was given to the subjects in the experimental group. The task, then in the next session was analysed and focused on the hardiness training to the group.

### Findings

Subjects were social science students with mean age of 21.5, 21 and 22 for all subjects, the experimental and control groups respectively. The students, mainly, come from the middle class (.76, .73 and .79 for the groups with the above mentioned order). Employment rate for the groups was 50%, 52% and 48% (same order).

Table 1. Homogeneity test: Duncan and Student-Newman-Keuls

Tests	Duncan		Student-Newman-Keuls	
Groups	N	Values	N	values
Hardiness	22	1.9867	22	1.8983
Mental health	21	1.8749	21	1.7988
Significant Value	p(.213)		p(.304)	

As the groups were matched in terms of hardiness and mental health, a homogeneity test was applied to determine whether the assumption violate or not. Duncan and Student-Newman-Keuls tests were administrated which indicate no difference between the groups in terms of the variables, hardiness and mental health.

Results of multivariate covariance for mental health and hardiness showed a significant difference between the groups at least in one of the dependent variables, hardiness and mental health. Multivariate covariance of hardiness components showed significant differences. It means that there was a significant difference between the groups at least in one of the components.

Table 2. Results of covariance on hardiness and mental health

Variables	df	F	P	Eta
Hardiness	1	10.9	<.001	.736
Mental Health	1	13.65	<.001	.813

Table 3. Results of covariance between components of hardiness

Variables	df	F	P	Eta
Control	2	5.79	.023	.435
Challenge	2	13.35	<.001	.845
Commitment	2	8.22	.008	.569

Table 4. Multivariate covariance on the dependent variables

Variables	Df	F	P	Eta
Depression	1	11.27	.002	.683
Anxiety	1	15.04	.002	.902
Physical complaints	1	8.49	.007	.594
Total score	1	9.432	.005	.468

According to content of table 4, all variables, depression, anxiety, physical complaints as well as total score changed when the groups were compared in their posttest scores.

## Discussion

This study showed the effectiveness of a hardiness training program to increase hardiness as well as promoting mental health level among the intervention group.

Findings of this study are in line with reports of some studies (Klag & Bradley ,2004; Nishizaka, 2002; Jimenez, Natera, Munoz, & Benadero, 2006; Bartone , 2009). As hardiness is a personality characteristic, and in this study it was found that the variable can be increased, the finding is a strong support for behaviorism in terms of handling personality characteristics. In fact, the theory believes personality is not only a fixed construct but also can be changed with applying suitable programs as well as using reinforcement mechanisms (Baldwin & Baldwin, 2001). The finding is very important due to well-known relationship between low

level of hardiness and having so many problems with regard to mental health and its components ( Walker, 2006). The dependent variables, depression, anxiety and physical complaints all relate to stress as a medium variable with serious problems such as heart deficiency as well as cancer (Power, 2010). Thus with programs which hardiness can be increased through, it can be expected to reduce the probability of being involved with fatal diseases like cancer and heart arrhythmia.

### **Limitations**

Two main limitations in this study were lack of gender variable as well as type of intervention beside to hardiness training.

### **Acknowledgement**

We, researchers of this study wish to thanks the staff of Scientific-Applied University who helped us a lot during the study.

### **References**

- Baldwin, J., & Baldwin, J. (2001). *Behavior Principles in Everyday Life*. New Jersey: Prentice Hall.
- Bartone, P. T. (2006). "Resilience under military operational stress: Can leaders influence hardiness?" *Military Psychology* 18: S131–S148.
- Bartone, P. T. (2009). "Academic stress and health: Exploring the moderating role of personality hardiness". *Scandinavian Journal of Educational Research* 53 (5): 421–429. DOI:10.1080/00313830903180349.
- Derogatis, L. R., Lipman RA, Cove L. (1974). The Hopkins Symptom Checklist(HSCL): a self-report symptom inventory. *Behavioural Science*, 19: 1-15.
- Derogatis, L.R. & Savitz, K.L. 2000. The SCL-90-R and the Brief Symptom Inventory (BSI) in Primary Care In: M.E.Maruish, ed. *Handbook of psychological assessment in primary care settings*, Volume 236 Mahwah, NJ: Lawrence Erlbaum Associates, pp 297-334.
- Dix, D. (2006). 'I Tell What I Have Seen' – The Reports of Asylum Reformer Dorothea Dix. *American Journal of Public Health*, 96(4), 622-624.
- Jimenez, B. M., Natera, N. I. M., Munoz, A. R., & Benadero, M. E. M. (2006). "Hardy personality as moderator variable of burnout syndrome in firefighters". *Psicothema* 18 (3): 413–418.
- Klag, S., & Bradley, G. (2004). "The role of hardiness in stress and illness: An exploration of the effect of negative affectivity and gender". *British Journal of Health Psychology* 9 (Pt 2): 137–161. DOI:10.1348/135910704773891014
- Kobasa, S. C. (1979). "Stressful life events, personality, and health – Inquiry into hardiness". *Journal of Personality and Social Psychology* 37 (1): 1–11. DOI:10.1037/0022-3514.37.1.1.
- Kobasa, S. C., Maddi, S. R., & Zola, M. A. (1983). "Type A and hardiness". *Journal of Behavioral Medicine* 6 (1): 41–51. DOI:10.1007/BF00845275. PMID 6876154.
- Kobasa, S. C., & Puccetti, M. C. (1983). "Personality and social resources in stress resistance". *Journal of Personality and Social Psychology* 45 (4): 839–850. DOI:10.1037/0022-3514.45.4.839.

Maddi, S. R. (2004). "Hardiness: An operationalization of existential courage". *Journal of Humanistic Psychology* 44 (3): 279–298. DOI:10.1177/0022167804266101.

Najarian, B., and Kiamarsi, A. (1997). CONSTRUCTING AND validation of a scale to assess psychological hardiness. *Journal of psychology*, 2(3):14-29.

Nishizaka, S. (2002). "Kindergarten teachers' mental health: Stress, pre-school teacher efficacy, and hardiness". *Japanese Journal of Educational Psychology* 50: 283–290.

Power, A (2010). "). Transforming the Nation's Health: Next Steps in Mental Health Promotion". *American Journal of Public Health* 100 (12): 2343–6. DOI:10.2105/AJPH.2010.192138

Richards, K.C.; Campana, C. Muse-Burke, J.L. (2010). "). Self-care and Well-being in Mental Health Professionals: The Mediating Effects of Self-awareness and Mindfulness". *Journal of Mental Health Counseling*, 32 (3): 247.

Sinclair, R. R., & Tetrick, L. E. (2000). "Implications of item wording for hardiness structure, relation with neuroticism, and stress buffering". *Journal of Research in Personality* 34: 1–25. DOI:10.1006/jrpe.1999.2265.

Soderstrom, M., Dolbier, C., Leiferman, J., & Steinhardt, M. (2000). "The relationship of hardiness, coping strategies, and perceived stress to symptoms of illness". *Journal of Behavioral Medicine* 23 (3): 311–328. DOI:10.1023/A:1005514310142.

Walker, M. J. (2006). The Effects of Nurses' Practicing of the HeartTouch Technique on Perceived Stress, Spiritual Well-Being, and Hardiness. *Journal Holistic Nursing*, 24(3) 164-175, doi: 10.1177/0898010105283343

Zarifian, M. (2004). Effect of stress on function of teachers in elementary school of Ahvaz, unpublished thesis of master in psychology, Shahid Chmran University.