

THE RELATIONSHIP BETWEEN PSYCHOLOGICAL HARDINESS AND ACHIEVEMENT MOTIVATION

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ABSTRACT

The present paper aims at investigating the relationship between psychological hardiness and achievement motivation of employees in Iran Marin Industrial Company (Sadra). 200 out of 400 employees in different sections were randomly selected and after describing the research purposes, two questionnaires of Ahvaz psychological hardiness measurement and Herman's achievement motivation were presented to them. The data were collected and statistical tests were analyzed afterwards. The findings indicated that there is a positive and meaningful relationship between employees' psychological hardiness and achievement motivation with 99% confidence using Pearson's coefficient correlation. Moreover, the bi-t test illustrated that men's psychological hardiness was greater than women's. Finally, Anova and Tukey post hoc tests revealed employees with lower than bachelor's degree have less psychological hardiness than the employees with bachelor or master degree.

Keywords: *Psychological hardiness, Achievement Motivation, Gender, Academic level*

1. INTRODUCTION

Nowadays, problems of societies and, in turn, the challenges which organizations have faced are getting more complicated, expansive and various, so they have called for better and more comprehensive ideas. The results of numerous studies on the role and importance of human forces have unanimously emphasized the integration of development of societies and human force in developing and growing organizations and reducing ineffective expenses. Organizational promotion researchers have found out that eligible and skilled human forces are infinite values and elements in developing organizations and countries in that a significant proportion of achievements in developed countries go back to these highly skillful and motivated people during the last half century (Bakhtiyar Nasr Abadi, et al. 2010). On the same line, the importance of human forces and their exclusive role has been counted as a strategic resource which is the designer and executive of disciplines and organizational processes and it has been granted a much higher hierarchy in that a lot of studies have been conducted on various facets,

elements and effective factors on achievement motivation (Martin, 2007).

The first researches on achievement motivation are believed to be carried out by Henry Moray (1938) and after that McClelland (1951) whose theories laid the foundations of other studies on job, education and its relationship with other psychological and behavioral features. Moray has defined achievement motivation in his book "Explorations in Personality" as persistent, continuous and repeated attempts to accomplish a difficult task and act accordingly to move to higher purposes and define clear-cut benefits. Rabideau (2007) explains that achievement motivation is a prerequisite for success and triumph; in addition, Kinchella and Glucksberg regard achievement motivation in terms of tendency to do difficult or high level tasks and to overcome others (Zanobini & Usui, 2002). However, Bernstein and Maier (2005) have presented a more comprehensive definition as achieving all goals in life and they have identified this motivation as an important element for progress of individuals' behavior including requirements, tendencies and ambitions in personal life while Martin and Pear (2003)

offered that achievement motivation is a tendency to reach vital skills and dominate them, or create some new ideas to control life and reach higher levels soon and fast. These definitions can clarify that achievement motivation is a key element in any given organizations which can depend on different environmental, psychological and personal factors. One of the most important psychological features which seems to have inseparable relationship with achievement motivation is psychological hardiness that has drawn researchers' attention in recent years. Psychological hardiness is a concealed and hidden variable (Britt, Adler, Bartone, 2001) which can be named as one of the most important elements in psychological health. It not only plays a vital role in physical and mental health, but also promotes progression tendency.

The individual with such a feature has deep understanding of life and acts with high control and precision, this person is always ready for any challenges in life. They interpret stressful and challenging life situations as normal and natural not as some hardships which are bound to them (Kobasa, 1979). As Kobasa and Maddi (1984) state psychological hardiness is a prominent characteristic which has a determining role in human cognition as an independent and valuable entity. This feature makes human efficient and capable who can react rationally and reasonably in very critical situations in that his/her mental and physical health are still preserved. Kobasa (1979)- a prominent theorist in this field- defined psychological hardiness as a composition of three main factors rooted in the believes of an individual in self, and the world as commitment, control and challenge. Commitment means the ability to know special values, purposes, and priorities, an accurate evaluation of a threat in life, and a suitable reflection to that specific situation. He identifies control as the ability of an individual to control and affect events and tensions in life. In the meantime, challenge means that a change is more common than stability and expecting a change is stimulation for growth not a threat to wellbeing (Kiamarsi and Abolghasemi 2007). The people with this hardiness believe that growth and development of anyone to obtain wisdom and reasonability can be achieved through abundant learning about good and bad experiences in a progressive life rather than having a comfortable routine life (Maddi, 2007; Maddi et al, 2002). The hardy people regard tension situations controllable rather than dangerous (Zakin et al, 2003).

Radi Eleiwi (2012) has presented some characteristics of people with high achievement motivation considering its various definitions. These features seem to have a close bond with those of commitment, control and challenge described earlier. These points include: tendency to succeed and avoid failures, sense of responsibility to solve personal and public problems, tendency to determine specific goals and making all attempts to achieve them in the best way, attempts in hardworking and resistance in their purpose, having perspectives optimistically, not wasting time, planning and reaching high skills, preferring the roles which differentiate them from others and overcoming others beside selecting skillful people rather than friends to promote their tasks. Studies on hardy people show that they believe they can affect their own experiences and they are able to fight hard and tough life situations. These people are optimists and on this line they face natural and common challenges in life occurring in their education, job and society (for example, Sheard & Golby, 2007, Bartone, et al, 1989; Britt, Adler, & Bartone, 2001; Florian, Mikulincer, & Taubman, 1995; Maddi, 1999; Maddi & Hightower, 1999).

Since this has proven to be a significant issue, there have been different studies on various aspects of psychological hardiness including educational achievement (Hosseini & Hedayati, 2014; Patton & Goldenberg, 1999; Kolodziej, 2010; Cole, Field, Harris, 2004), sports achievement (Gharazi et al, 2014; Radi Eleiwi, 2012; Shepard, 2010), physical and mental health (Kobasa, 1970; Florian, Mikulincer, & Taubman, 1995) reverse association with job burnouts (Mostaghni and Sarvghad, 2013; Hosseinpour et al, 2008, Sortet and Banks 2001), anxiety disorders in job and education (Moazedian, Ahghar, Aref-Nazari, 2014; Glaser and Glaser, 1990; Mohamadi Hasel et al., 2011; Maddi and Khoshaba, 2001). Schneider (1986) proved that the more the psychological hardiness in employees, the better income and more effective. Weibe (1991) also conducted an experimental study on both genders to do a threatening assignment, the results indicated that the examinees with high hardiness have more tolerance against failures than the ones with low hardiness, and such people maintain their motivation throughout the task.

There have been some other studies on gender differences regarding hardiness, but the results have not been identical. Kiamarsi (1999) showed that men have more hardiness compared to women since they are less excited in problematic situations and act more reasonably, but women have more

excitements. However, Sheard (2009) presented totally different results. He showed that psychological hardiness is much higher in school girls than school boys. Some other studies such as HosseinPour and et al (2008) showed no meaningful difference between these genders. Although there have been some researches on the relationships between psychological hardiness with educational success, there have been no studies in particular to investigate the relationship between hardiness and level of education.

The present study has pursued the other researches and has studied the relationship between the variable of psychological hardiness and achievement motivation among Sadra's employees considering gender and education variables. Therefore, the researcher has assumed the following hypotheses:

- 1-There is a meaningful relationship between psychological hardiness and achievement motivation of employees
- 2-Both genders present different psychological hardiness.
- 3-There is a meaningful relationship between psychological hardiness and level of education.

2. MRTHODOLOGY

The present study has been descriptive and a coherent pattern which can be classified in fundamental researches. The statistical society has been 400, out of which 200 are selected randomly using Morgan table. 73.5% were men and 85.5% were women with bachelor or higher degrees. After introducing the research purposes, research instruments were presented to them.

3. INSTRUMENT

Two psychological hardiness questionnaire of Ahvaz's and Herman questionnaire were used. Ahvaz questionnaire is a pen-paper self-report in 27 articles. This questionnaire was first made up and validated by Kiamarsi, Najariyan and Mehrabee Zadeh (1998). Two methods of test-retest and internal consistency were implemented. Retest reliability coefficients of the particip[ants in two cycles (test-retest) was 84% in total; made up by 85% females and 84% males. Cronbach's coefficient was 76% in general, 74% and 76% for females and males respectively. The reliability

coefficients were satisfactory considering the findings. Hermans' achievement motivation questionnaire (1970) has 29 items which enjoy a very high correlation and meaningfulness with the test. This test is designed in sentence completion and multiple-choice forms and they are scored based on development of achievement motivation. Hooman and Asgari (2002) conducted a research to examine validity, reliability and normality of achievement motivation test. It was again revalidated by Darabi in 2010. The test validity coefficient was 0.803 based on Cronbach's alpha which confirms the validity of the test. The reliability and validity increased to 0.84 by eliminating six questions.

4. DATA ANALISIS APPROACH

The data were analyzed using SPSS, and descriptive and deductive statistical approaches including Pearson's correlation, bi-T-test, and ANOVA were practiced.

5. RESEARCH FINDINGS

The statistical indicators related to psychological hardiness, and achievement motivations were calculated. The descriptive data related to each variable can be observed in the following table. In order to illustrate the distribution of data, the research variables (psychological hardiness, achievement motivation) are shown by column graphs.

Table 1- Statistical parameters related to psychological hardiness and achievement motivation

Variable	Central parameters		Scattering parameters			Distributing parameters	
	Median	Mean	Range	SD	Variance	Skewed	Stretch
Psychological hardiness	65	65.05	50	67.75	8.23	-0.11	0.93
Achievement motivation	78	78.05	33	54.28	7.36	-0.22	-0.32

Regarding the above table, since the skewed and stretch coefficients are less than one, it can be concluded that of psychological hardiness and achievement motivation of the hypothesis have normal distribution and the mean can be accounted for the most suitable statistical parameter in parametric study. Therefore, Pearson's coefficient has been used to analyze the data.

First research question: Is there a meaningful relationship between psychological hardiness and achievement motivation?

In order to answer this question, and study the scores of psychological hardiness and achievement motivation of the employees, considering the fact that all the assumptions have been provided, the results can be found in table 2.

Table2- The results of Pearson correlation between psychological hardiness and achievement motivation

Variable	Mean	SD	N	Correlation coefficient	Meaningful level
Psychological hardiness	65.05	8.23	200	0.239	0.001
Achievement motivation	78.05	7.36			

As the table shows, and with the emphasis on the coefficient correlation (0.239), and since the meaningful level is lower than 0.01, it can be concluded that there is a meaningful relationship between psychological hardiness and achievement motivation of employees ($\alpha=0.01$). in other words, as the level of psychological hardiness increases, achievement motivation increases and vice versa.

Second research question: Is there a meaningful relationship between psychological hardiness of men and women?

A bi t-test was used to investigate the meaningfulness of the relationship between psychological hardiness of men and women. The results are manifest in table 3.

Table 3-t-test results of men's and women's psychological hardiness

Level	No.	Mean	SD	T	Degree of freedom	Level of meaningfulness
Men	147	78.93	7.70	2.87	123.07	0.001
Women	53	75.60	5.73			

As the table shows along with the obtained "t" (2.87), and considering the meaningful level lower than 0.05, it can be claimed that there is a meaningful difference between men's and women's psychological hardiness (-0.01) and men have higher psychological hardiness.

Third research question: Is there a meaningful relationship between psychological hardiness and level of education?

In order to answer the question of relationship between psychological hardiness and level of education, regarding the fact that all the hypotheses were available, ANOVA was practiced. The results are presented in tables four and five.

Table 4-Results of ANOVA analysis: comparing the mean of psychological hardiness of employees with different levels of education

Variables	Mean	SD	Meaningful level
Below bachelor/bachelor	3.82	1.47	0.027
Below bachelor/ master	6.06	1.79	0.003
Bachelor/master	2.24	1.34	0.222

As it can be evident from the table, the meaningful level is lower than 0.01. Therefore, confirming the obtained F (5.79), it can be claimed that there is a meaningful difference between psychological

hardiness and level of education. Thus, Tukey test was used to determine the meaningful level between groups, and the results are presented in table 5.

Table 5-Results of Tukey test between the mean of psychological hardiness and level of education

Change source	Square root total	Degree of freedom	Square total	F	Meaningful level
Variance btw groups	600.18	2	300.9	5.79	0.004
variance in groups	10203.31	197	51.79		
Total variance	10803.50	199	-		

The results of table 5 illustrate that employees with below bachelor have less psychological hardiness than the ones with bachelor and master.

6. DISCUSSION AND RESULTS

The main purpose of this research paper was to investigate the relationship between psychological hardiness and achievement motivation of employees. The results indicated that there is a direct and meaningful relationship between these two factors. In other words, the higher psychological hardiness, predicate the higher achievement motivation and vice versa.

The first hypothesis is in line with other studies in the country and others. Hosseini and Hedayati (2014) confirmed the positive relationship between psychological hardiness and achievement motivation of university students. HosseinPour and et al (2008) studies the relationship between psychological hardiness and achievement motivation with job burnouts among employees. He proved the negative relationship between these factors and added that there is a positive relationship between psychological hardiness and achievement motivation.

In 2013, Taheri Nasab studied the psychological hardiness and education tolerance with the function and achievement motivation of students and the results showed that psychological hardiness can predict educational achievement motivation. Hardi Olivier (2012) illustrated that the relationship between psychological hardiness and achievement motivation of disabled athletes was positive in the West Bank. Cole, Field and Harris (2004) proved that the students with high psychological hardiness could have higher achievement motivation. This result was confirmed in another study by Sanson, Wiebe and Morgan in 1999 in which they found out that hard people have more supervision on their tasks when exposed to difficult experiences (e.g. boring or difficult assignments) and they also intentionally control their own reactions. Therefore, when people feel the control of stressful or unpleasant situations, and they perceive their ability to challenge the condition, and they show no interest in that task, but they are well-aware of the learning value in that situation, if they realize that this is worth the challenge, they maintain their high

spirit and they make all their attempts to turn that condition to a better attractive one.

A t-test was used to determine the relationship between psychological hardiness of males and females. The results showed that there is meaningful difference between the psychological hardiness of men and women ($\alpha=0.01$) and men have more psychological hardiness than women. The findings are in parallel with the ones conducted by Moradi (2010), Vali Nezhad Khorrami (2007), Veisi and et al (2001), and Kiamarsi (1999). To confirm this difference, the researchers believe that one of the qualities of hard people is that they get less excited when encountered with a problem, and they seem more reasonable. However, women are more excited when they come up with a problem rather than being more logical. Wang and Miao (2007) agree that women and men are different aspects of psychological health because different resources and facilities are available for each gender, hence; different health situations.

There have been a lot of achievements regarding the relationship between gender and psychological hardiness and they are all founded on some different studies. The results of studies by Feiz, Neshat Doost and Naeli (2002) and Golchin (2011) understood that there was no meaningful difference between psychological hardiness and gender. However, in some other studies, the difference between two genders has not been reported the same, like the present one or researches by Naderi and Hosseini (2011), Moeiein and et al (2012). For instance, despite this paper and other similar studies showing this quality more highlighted in men, in a study conducted by Zahed Babelan and et al (2013) to determine the psychological hardiness and hope and forgiveness of athletes, it was demonstrated that female university students have more psychological hardiness than men. These different results can be due to some cultural, bringing-up and goal backgrounds. For example, majority of studies have focused on educational and sports which have similar values for both genders, but jobs are significantly more important to men rather than women.

ANOVA was practiced to answer the third research question regarding the relationship between psychological hardiness and level of education. The obtained F was a little less than 0.01 in meaningful level equal to 5.79. Therefore; it can be said that

there is meaningful difference between the mean of psychological hardiness and level of education. Tukey test was also used to determine the meaningful difference. It indicated that the employees with lower than bachelor degree have less psychological hardiness compared to the ones with bachelor or master degrees.

Some similar studies confirm the meaningful and positive relationship between psychological hardiness and educational success (Westman, 1990; Patten & Goldenberg, Keyes, 2002; Allisi & Shanisi, 1993). Narimani and et al (2009) and Verdi (2002) showed that there is positive and meaningful relationship between psychological hardiness and educational success i.e. when people have higher psychological hardiness, they will have more educational success. In general, it can be perceived that hard people, due to their commitments to their dreams and purposes in life, change the tasks to be more appealing and attractive to themselves because of their challenging spirit and personality although that task might not sound very pleasing or enjoyable. They even turn this opportunity into a learning experience to grow better when they are faced with problems due to their ambitious thoughts. Maddi (1999) explains that hard people presume different activities (e.g. vocational tasks) to be absorbing (commitment factor) which has been selected by their own free will (control factor) and they consider these activities a stimulant for their learning rather than a barrier or loss. Therefore, Kobasa agrees with Maddi that hardiness is, in fact, to understand the positive meaning of life (Maddi & Kobasa, 1984).

Based on this research paper and parallel studies, it can be highlighted that some positive features such as challenging spirit and internal control source which are called psychological hardiness play a great role in achievement motivations in life like education and family. Since any member of any given organization is like a brick to promote, develop and grow that organization, achievement motivation sounds essential and vital for the individuals of that company as a personal trait. Therefore, recruiting people with high psychological hardiness can be suggested along with introducing some programs which can strengthen these positive and practical characteristics in people's educational carrier or job situation.

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