WCPCG-2010

Comparison of hardiness, sociotropy and autonomy in team and individual sports and investigating the impact of these personality characteristics on sport achievement

Masoumeh Karimi[a] *, Mohammad Ali Besharat[a]

[a]Department of Psychology, University of Tehran, P. O. Box 14155-6456, Tehran, Iran

Abstract

This study compared hardiness, sociotropy, and autonomy in team and individual sports and investigated the impact of these personality characteristics on sport achievement. 134 athletes (92 team, 42 individual, 88 males, 46 females) were included in this study. Participants completed the Hardiness Scale (HS) and the Sociotropy-Autonomy Scale (SAS). The athletes' coaches were asked to rate the Sport Achievement Scale (SAS) in order to measure athletes' sport achievement. The results revealed that team and individual sport athletes scored significantly higher on sociotropy and autonomy, respectively. No significant difference was found between the two groups on hardiness.

Keywords: Hardiness, sociotropy, autonomy, sport achivement, sport psychology.

1. Introduction

Sport is no longer a pastime, run and organized by amateurs. It is a multi-billion pound business that competes for scarce resources and uses, amongst other things, professional management techniques (Robinson, 2003). In this push toward efficiency, effectiveness and value for money, it has become of even greater interest to players, coaches, administrators, spectators and owners to identify psychological attributes and mental skills associated with superior sport performance as a first stage in facilitating their development (Golby & Sheard, 2004).

Hardiness has been conceptualized as a combination of the three attitudes (3Cs) of commitment, control, and challenge (Kobasa, 1979). Commitment (vs. alienation) epitomizes those individuals who are committed to and feel deeply involved in the activities of their lives. Control (vs. powerlessness) reflects a desire to continue to have an influence on the outcomes going on around you, no matter how difficult this becomes. Challenge (vs. security) typifies an expectation that life is capricious, that changes will stimulate personal development, and that potentially stressful situations are appraised as exciting and stimulating rather than threatening (Maddi, 2006).

_____

* Masoumeh Karimi, Tel.: +0 911 334 1554.
E-mail address: karimi_m_ir@yahoo.com.

Beck (1983) introdused sociotropy and autonomy as two personality constructions that influence one's psychologycal functioning. Sociotropy or social dependency is called to one's attempt to have positive interaction with others and maintain social communication. This personality construct is consist of beliefs, feedbacks and goals that lead one toward others and make him to absorb acceptance, intimacy, protection and respect through these relations (Beck, 1983; Beck, Epstein, Harrison & Emery, 1983). A sociotropic person achieve his goals through interpersonal relationships and have a strong motivation to keep in touch with others. Autonomy is called to one's attempt to enhance and keep his independency, freedom in choosing and doing, achieving valuable goale and personal successes (Beck, 1983; Beck et al., 1983). An autonomic person keeps his distance from others, avoides loosing and seeks for more personal control on surrounding environment and pepole.

The aim of this study is to compare hardiness, sociotropy, and autonomy in team and individual sports and to investigate the impact of these personality characteristics on sport achievement.

2. Method

2.1. Participant

A sample of N=134 (92 team, 42 individual, 88 males, 46 females) from the Faculty of Physical Education and Sport Sciences, the University of Tehran, and several sport clubs were included in this study. The mean age of participants was 22.35 years (SD = 2.28), the mean age of team sport athletes was 22.42 years (SD = 2.50), and individual sport athletes was 22.21 years (SD = 2.47).

2.2. Measures

Hardiness Scale (HS)- The Hardiness Scale (HS; Janda, 2001) is a 45-item self-report measure that provides a total hardiness score and also three subscales relating to (a) commitment, (b) control, and (c) challenge. Scores were recorded on a four-point Likert scale from 0 to 3. There were 15 questions for each subscale. The Hardiness Scale has demonstrated excellent psychometric properties for measuring hardiness and mental health in both English (Janda, 2001) and Persian form (Kobasa, 1979).

Sociotropy-Autonomy Scale (SAS)- The Sociotropy-Autonomy Scale (SAS; Besharat, 2008) is a 60-item self-report measure that provides separate scores for two subscales relating to (a) sociotropy and (b) autonomy. Scores were recorded on a five-point Likert scale from 0 to 120. The Sociotropy-Autonomy Scale (SAS) has demonstrated excellent psychometric properties in both English (Janda, 2001) and Persian form (Besharat, 2006).

Sport Achievement Scale (SAS)- The Sport Achievement Scale (SAS) is a 16-item self-report measure which is answered by coaches and provides a score that reveals athletes' sport achievements. Scores were recorded on a five-point Likert scale from "very low" to "very high". The results of content validity which were assessed according to sport coaches show that Kendal concordance coefficient is 0.54. The results of the X^2 for assessing statistical meaning of this coefficient (X^2= 163.18, df = 15, P < 0.001) was significant (Besharat, Abasi & Shoja ádin, 2002).

3. Results

Results of t-test for comparing hardiness, sociotropy, autonomy and sport achievement in individual and team sports scores is showed in table 1. The team sport athletes scored significantly higher on sociotropy and the individual sport athletes scored significantly higher on autonomy. Although the individual sport athletes scored higher on hardiness but the difference was not significant.

Table 1. Results of t-test for comparing hardiness, sociotropy, autonomy and sport achievement in individual and team sports scores (df = 132)

		M	SD	t	p
Hardiness	1	80.02	20.09	-1.64	0.102
	2	86.14	17.40		

Sociotropy	1	73.31	17.44	2.39	0.018
	2	65.80	15.41		
Autonomy	1	67.30	16.83	-2.32	0.021
	2	74.28	14.36		
Sport achievement	1	62.68	8.79	0.533	0.595
	2	61.83	8.05		

1 = team sport   2= individual sport

Summary of variance and regression analyses of sport achievement in team sport athletes is shown in table 2. Hardiness, sociotropy and autonomy as predictor variables and sport achievement as dependent variable were interred in regression equation. These variables predict 26 percent of sport achievement variance. It also shows that increased hardiness and sociotropy can enhance the possibility of sport achievement in this group.

Table 2. Summary of variance and regression analyses of sport achievement in team sport athletes

	SS	df	Ms	F	P	R	R^2	SE
Regression	1847.85	3	615.95	7.68	0.262	0.512	0.000	10.43
Residual	5196.00	88	59.04					

	B	SEB	Beta	t	P
Hardiness	0.144	0.04	0.344	3.58	0.001
Sociotropy	0.208	0.064	0.412	3.22	0.002
Autonomy	0.008	0.069	0.016	0.122	0.903

Summary of variance and regression analyses of sport achievement in individual sport athletes is shown in table 3. Hardiness, sociotropy and autonomy as predictor variables and sport achievement as dependent variable were interred in regression equation. These variables predict 74 percent of sport achievement variance. It also shows that increased hardiness and autonomy can enhance the possibility of sport achievement in this group.

Table 3. Summary of variance and regression analyses of sport achievement in individual sport athletes

	SS	df	Ms	F	P	R	R^2	SE
Regression	1969.29	3	656.43	36.12	0.000	0.860	0.740	4.26
Residual	690.83	38	18.17					

	B	SEB	Beta	t	P
Hardiness	0.185	0.043	0.400	4.26	0.000
Sociotropy	-0.045	0.045	-0.087	-1.01	0.315
Autonomy	0.340	0.052	0.607	6.54	0.000

4. Discussion

The aim of this study was to compare hardiness, sociotropy, and autonomy in team and individual sports and to investigate the impact of these personality characteristics on sport achievement. Results suggested a significantly positive relation between hardiness and sociotropy and achievement in team sports and hardiness and autonomy in individual sports. The findings also suggested the significantly positive impact of these personality characteristics with sport achievement in both groups.

Results showed that individual sport athletes scored higher on hardiness but the difference was not significant. In this situation athlet should manage the stress and responsibility by himself but team athletes do not have such a situation so they view highly competitive contests in a less stressful manner. In addition any competition regardless of its characteristics makes athlete to have a minimum level of hardiness to committee for doing best, control and manage the game and challenge for the result.

Being sociotrop is the most important principle of team sport athlete. This characteristic promote social spirit in sport team by making athletes to have positive interaction with eachother, reinforcement of social believes and feedbacks and interpersonal communications (Beck, 1983) and activation of solidarity. Sport achievement will be enhanced in this way. Autonomy in individual sports helps athlete to concentrate on supression of enviromental stimuli and activates and reinforces the achievement motivation. It lets athlete to do his best freely and guides his real power toward achieving the goal.

Limitations such as the sample type (volunteer participants), kinds of studied sports and ignorance of mediator variables call for further works. All these limitations cannot deny the efficiency of the results which emphasize on the importance of specific psychological variables in sport achievement. Sport coaches can rely on these findings and try to improve their athletes abilities to guarantee their success.

References

Beck, A. T. (1983). Cognitive therapy of depression: new perspectives. In Clayton, P. J., & Barrett, J. E. (Eds.), *Treatment of depression: old conroversies and new approaches*. New York: Raven Press.

Beck, A. T., Epstein, N., Harrison, R. P., & Emery, G. (1983). *Development of the Sociotropy-Autonomy Scale: a measure of personality factors in psychopathology*. Unpublished manuscript. Center for Cognitive Therapy, Philadelhia: University of Pennsylvania Medical School.

Besharat, M. A. (2006). Psychometric properties of the Sociotropy-Autonomy Scale. Unpublished research report. Tehran: University of Tehran. [Farsi]

Besharat, M. A. (2008). Reliability, validity and factorial analysis of the Hardiness Scale. *Harakat, 35,* 31-46. [Farsi]

Besharat, M. A., Abbasi, Q. R., & Shojaeddin, S. (2002). An investigation of the relationship between self-esteem and sport achievement among footballers and wrestlers. *Harakat,* 12, 31-44. [Farsi]

Golby, J., & Sheard, M. (2004). Mental toughness and hardiness at different levels of rugby league. *Personality and Individual Differences*, 37 933–942.

Janda, L. (2001). *The psychologist's book of personality tests*. New York: Wiley.

Kobasa, S. C. (1979). Stressful life events, personality and health: an inquiry into hardiness. *Journal of Personality and Social Psychology*, 37, 1–11.

Maddi, S. R. (2006). Hardiness: the courage to grow from stresses. *Journal of Positive Psychology*, 1, 160–168.

Robinson, L. (2003). The business of sport. In B. Houlihan (Ed.), *Sport & society: a student introduction* (pp. 165–183). London: Sage.