

THE RELATIONSHIPS BETWEEN IMAGERY TYPES AND GOAL ORIENTATIONS IN THROWERS

¹Kale Kizildag, Esen; ¹Cepikkurt, Fatma

¹Mersin University, Physical Education and Sport High School

Contact address: Esen Kizildag Kale, Mersin University, Physical Education and Sport High School Ciftlikkoy Campus, Mersin, Turkey.

Phone: +90 532 5929230

e-mail: ekizildag@hotmail.com

Abstract:

The purpose of this study was to investigate the relationship between imagery types and goal orientations in throwers. 62 athletes (33 female and 29 male) who competed in track and field national team ($\bar{X}_{age} = 18.70$ years; $SD = 2.88$, $\bar{X}_{sportage} = 6.26$ years; $SD = 3.16$) participated in this study. All participants completed Sport Imagery Questionnaire-SIQ and Task and Ego Orientation in Sport- TEOSQ. Relationships between imagery types and goal orientations in throwers were analyzed with Pearson Moments Products Correlation Coefficients ($p \leq .05$). The results revealed that there were significant relationships between ego orientation and motivational- specific, motivational general-arousal, motivational general- mastery for athletes. ($r = .304, .251, .275$; $p \leq .05$). Also there were significant relationships between task orientation and motivational general-arousal, motivational general- mastery for athletes ($r = .320, .348$; $p \leq .05$).

Key words: cognitive imagery, motivational- specific imagery, motivational general-arousal imagery, motivational general- mastery imagery, ego orientation, task orientation

Introduction

The purpose of this study was to investigate the relationship between imagery types and goal orientations in throwers. Mental imagery has been recognized as an important tool in improving athletic performance [10]. Athletes often use these mental episodes [10, 11]. Imagery has been defined as; “creation or recreation of an experience generated from memorial information, involving quasi-sensorial, quasi-perceptual and quasi-affective characteristics, which is under the volitional control of imager, and it may occur in the absence of the real stimulus antecedents normally associated with the actual experience” [12]. In the other definition; imagery may be identified all the senses to re-create or create an experience in the mind [16].

Most of the current imagery research in sport has supported Paivio's (1985) functional analysis of conceptualization of imagery into cognitive and motivational functions that operate on specific and general levels [14]. Hall et al. (1998) have provided sport- oriented descriptions of these functions are: Cognitive Specific (CS: imaging skills), Cognitive General (CG: imaging strategies), Motivational Specific (MS: imaging goal-oriented responses and activities), and Motivational General (MG: affect and arousal) [8, 9]. Based on this model, Hall et al. (1998) developed the Sport Imagery Questionnaire (SIQ) to assess the frequency with which athletes use these imagery functions. These functions are: cognitive specific- (CS: imagery directed toward skill development or production), cognitive general- (CG: imagery related to competitive strategies), motivational specific- (MS: imagery that represents specific goals and goal- oriented behavior), motivational general-arousal- (MG- A: imagery related to arousal, relaxation, and competitive anxiety), and motivational general-mastery- (MG- M: imagery representative of effective coping and confidence in challenging situations).

It is supposed that individuals are predisposed (e.g. by their personal theory of achievement) to act in an ego- or task involved manner, which are called achievement goal orientation [15]. Nicholls' motivation conceptual framework pertaining to achievement goals was used to study the relationship between two implicit goal orientations (task and ego). In ego orientation ability can be evidenced by performing better than others, by surpassing normative- based standards, or by achieving success with little effort. In task orientation an undifferentiated concept of ability is utilized when subjective achievements are compared to self-referenced standards [13].

Athletes with ego orientations are susceptible to anxiety (cognitive and somatic) before and during performances if they compare their ability with their components. By setting high or low standards, athletes essentially avoid or escape comparing their performance to others. [7]. Athletes with task orientations have

less susceptible to anxiety. They have more control about success and failure [5]. Ego orientations are also associated with pressure from parents, coaches and important people to reach exacting goals, and with concern over making mistakes. With task orientations, athletes may set exacting goals, but these goals conform to the athlete's own standards [6].

In summary, little research has examined the relationship between imagery types and goal orientations. The aim of the present study was to determine whether there is a relationship between these psychological skills. In this study, it was hypothesized that there is a relationship between ego orientation and Motivational General- Arousal and Motivational General-Mastery. And also it was hypothesized that there is a relationship between task orientation and all imagery types.

Methods

Volunteered 62 athletes (29 male and 33 female) who competed in track and field national team ($\bar{X}_{age} = 18.70$ years; $SD = 2.88$, $\bar{X}_{sportage} = 6.26$ years; $SD = 3.16$) participated in this study. Sport Imagery Questionnaire (SIQ) and Task and Ego Orientation in Sport Questionnaire (TEOSQ) were used in our study.

Sport Imagery Questionnaire (SIQ) was used to assess the frequency of imagery use by the athletes [9]. SIQ consists of 30 items rated on a 7-point Likert scale and has 5 subscales (CS, CG, MS, MG-A, MG-M). Each subscale consists of six items. In Turkish version of SIQ, factor analysis has supported the Questionnaire's four-factor structure and 21 items. KMO value of SIQ was .876. This value showed that the sample size is adequate for factor analysis. Test of Bartlett's Sphericity which was used for data analysis of the factors that determine the suitability of SIQ was $\chi^2 = 3586,067$ and $p < 0.001$. Items, related to CS and CG, were collected under same subscale labeled as Cognitive Imagery (CI). The subscales were Cognitive Imagery, Motivational Specific Imagery, Motivational General-Arousal, Motivational General-Mastery. The internal consistency estimates computed with Cronbach alpha were .81, .80, .71, .59 for Cognitive Imagery, Motivational Specific Imagery, Motivational General- Arousal, Motivational General- Mastery, respectively.

Task and Ego Orientation in Sport Questionnaire (TEOSQ) was used to assess the identify of goal orientations [4]. TEOSQ consists of 13 items rated on a 5- point Likert scale and has 2 subscales (task orientation and ego orientation). The internal consistency estimates computed with Cronbach alpha were .87 for task orientation and .59 for ego orientations. Pearson Moments Products Correlation Coefficients was used to determine whether there was a relation or not between imagery and goal orientations in throwers.

Discussion and Conclusion

Descriptive statistics were given for age and sportage related to gender (Table 1).

Table 1. Descriptive statistics of throwers.

	gender	n	\bar{X}	SD
age	F	33	19,00	2,88
	M	29	18,38	2,04
sportage	F	33	7,36	3,33
	M	29	5,00	2,45

The results of relationship between imagery types and goal orientations in throwers were given in Table 2.

Table 2. The relationships between SIQ subscales and TEOSQ subscales in throwers.

	Cognitive Imagery (CI)	Motivational Specific (MS)	Motivational General-Arousal- (MG- A)	Motivational General-Mastery- (MG- M)
Ego Orientation	-,061	,304(*)	,251(*)	,275(*)
Task Orientation	-,009	,248	,320(*)	,348(**)

* $p \leq .05$

** $p \leq .01$

The results revealed that there were significant relationships between ego orientation and motivational- specific, motivational general-arousal, motivational general- mastery for athletes. ($r = .304, .251, .275$; $p \leq .05$). Also there were significant relationships between task orientation and motivational general-arousal ($r = .320$; $p \leq .05$), and task orientation and motivational general- mastery for athletes ($r = .348$; $p \leq .01$).

In this study, we assessed the relationship between imagery types and goal orientations in throwers. The results of this study showed that national throwers use imagery in their training programme and they know how they use. Because of they were elite athletes, they use imagery and their orientations are both for their best performance and for winning. Cumming, Hall, Harwood and Gammage's study (2002) reported that goal orientation is one of personal characteristic that may influence the efficacy of imagery [3]. Sport psychology researchers have examined task and ego orientation [4, 2]. In the results showed that task oriented athletes show their ability by mastering tasks. The results were consistent with our findings. In another study it was found that athletes with a low-task /high-ego orientation might use more motivational specific imagery, the function of imagery that involves them imaging themselves winning and beating opponents. Athletes with this profile might also be using more motivational general-arousal imagery, the function of imagery associated with arousal and anxiety [17]. The findings also supported our study.

In the literature there has been limited research about the relationships between imagery use and goal orientation. This study reinforces the need for further research to investigate about this topic.

References

- [1] Ames, C. 1984. Competitive, co- operative and individualistic goal structure: A motivational analysis. In *Research on motivation in education: Student motivation*. Eds. R. Ames & C. Ames, 177- 207. New York: Academic Press.
- [2] Chi, L. 2004. Achievement goal theory. In *Sport psychology: Theory, applications and issues*, 2nd ed., ed. T. Morris and J. Summers, 152- 174. Brisbane, Australia: Wiley.
- [3] Cumming, J., Hall C. R., Harwood, C., Gammage, K. 2002. Motivational orientations and imagery use: a goal profiling analysis, *Journal of Sports Sciences*, 2002, 20, 127- 136.
- [4] Duda, J.L. (1992). Sport and exercise motivation: a goal per- spective analysis. In *Motivation in Sport and Exercise*. Ed. G. Roberts, 57- 91. Champaign, IL: Human Kinetics.
- [5] Duda, J. L., Hall, C. R. 2001. Achievement goal theory in sport: Recent extensions and future directions.. In *Handbook of research on sport psychology*, 2nd ed., ed. R. N. Singer, H. A. Hausenblas, and C. M. Janelle, 417- 443. New York: Wiley.
- [6] Dunn, J. G. H., Dunn, J. C., Syrotuik, D. G. 2002. Relationship between multidimensional perfectionism and goal orientations in sport. *Journal of Sport & Exercise Psychology*, 24, 376- 395.
- [7] Galluci, N. T. 2007. *Sport Psychology: Performance Enhancement, Performance Inhibition, Individuals, and Teams*, 151- 168, New York: Psychology Press.
- [8] Hall, C. R. 1998. Measuring imagery abilities and imagery use. In *Advances in sport and exercise psychology measurement*, ed. J. L. Duda, 165- 172. Morgantown, WV: Fitness Information Technology.
- [9] Hall C. R., Mack D., Paivio A., Hausenblas H.A. (1998). Imagery use by athletes: Development of the Sport Imagery Questionnaire. *International Journal of Sport Psychology*, 29: 73- 89.
- [10] Hall, C. R. 2001. Imagery in sport and exercise. In *Handbook of research on sport psychology*, 2nd ed., ed. R. N. Singer, H. A. Hausenblas, and C. M. Janelle, 529- 549. New York: Wiley.
- [11] Martin, K. A., Moritz, S. E., and Hall, C. R. 1999. Imagery use in sport: A literature review and applied model. *Sport Psychologist* 13: 245- 268.
- [12] Morris T., Spittle M., Watt A. P. (2005). Definitions: What is imagery? In *Imagery in sport*. 13- 28. Human Kinetics: Champaign, IL.
- [13] Nicholls, J. G. (1984). Achievement motivation: Conceptions of ability, subjective experience, task choice, and performance. *Psychological Review*, 91, 328-346.
- [14] Paivio, A. (1985). Cognitive and motivational functions of imagery in human performance. *Canadian Journal of Applied Sport Science*, 10, 22–28.
- [15] Roberts, G. C., Treasure, D. C., Conroy, E. C. (2007). Understanding the Dynamics of Motivation in Sport and Physical Activity. In *Handbook of sport psychology*, 3rd ed., ed. G. Tenenbaum, C. E. Eklund, 3- 30. New Jersey: John Wiley & Sons.

- [16] Vealey, R. S., Greenleaf, C. A. 2001. Seeing is believing: Understanding and using imagery in sport. In *Applied sport psychology: Personal growth to peak performance*, 4th ed., ed. J. M. Williams, 247-288. Mountain View, CA: Mayfield.
- [17] White, S.A. and Zellner, S.R. (1996). The relationship between goal orientation, beliefs about the causes of sport success, and trait anxiety among high school, intercollegiate, and recreational sport participants. *The Sport Psychologist*, 10, 58- 72.