

ACHIEVEMENT GOALS AND PHYSICAL SELF-PERCEPTIONS OF ADOLESCENT ATHLETES

ZISAN KAZAK CETINKALP
Ege University

The relationship between achievement goals and physical self-perceptions of adolescent athletes was examined in this study. Participants were 208 adolescent athletes with a mean age of 16.35 ± 0.48 years. Independent samples *t* tests, Pearson correlations, and regression analysis were used to analyze the data. The results showed that female athletes' mastery-avoidance scores were higher than male athletes'. Mastery-approach goals were related to sports competence and global physical self-concept. Performance-approach goals were associated with sports competence, global physical self-concept, and global self-esteem. Performance-avoidance goals were related only to sports competence. In addition, the mastery-approach goal was predicted by global physical self-concept, and performance-approach and performance-avoidance goals were positively predicted by sports competence.

Keywords: achievement goals, sports competence, physical self-concept, global self-esteem, adolescent athletes.

Achievement goal orientations are affected by athletes' self-perceptions and behavioral patterns in achievement settings such as sport (Dweck & Leggett, 1988). Achievement goals reflect differences in an individual's conception of ability. The 2 x 2 achievement goal framework proposed by Elliot and colleagues (Elliot, 1997; Elliot & Harackiewicz, 1996), comprises four achievement goals: mastery-approach (MAp), mastery-avoidance (MAv), performance-approach (PAp), and performance-avoidance (PAv). MAp goals are focused on absolute or intrapersonal competence and a positive valence of competence (dela Rosa, 2010). In the MAp construct, competence is defined in terms of self-improvement. MAv goals are based on trying to avoid losing one's skills, abilities,

Zisan Kazak Cetinkalp, School of Physical Education and Sport, Ege University.

Correspondence concerning this article should be addressed to: Zisan Kazak Cetinkalp, School of Physical Education and Sport, Ege University, Bornova, Izmir 35100, Turkey. Email: f.zisan.kazak@ege.edu.tr

or knowledge (Elliot & Thrash, 2001), and competence is defined in terms of the absolute requirements of the task or one's own gain pattern and is evaluated negatively. PAp goals are focused on doing better than other individuals (Elliot & Thrash, 2001) and competence is normatively defined and positively evaluated (Elliot & McGregor, 2001). PAv goals refer to avoiding doing worse than others and are focused on avoiding normative incompetence (Elliot & McGregor, 2001; Elliot & Thrash, 2001).

Competence is at the conceptual core of the achievement goal construct. Bong (2009) stated that achievement goals are strongly predicted by perceived competence. This probably mediates the influence of achievement goals on achievement-related outcomes (Adie, Duda, & Ntoumanis, 2008; Nien & Duda, 2008; Wang, Liu, Lochbaum, & Stevenson, 2009). Athletes who adopt PAp goals should be more self-confident (Stoeber & Crombie, 2010). In addition, Jagacinski, Kumar, Boe, Lam, and Miller (2010) reported that changes in perceived competence influence changes in the strength of endorsement of achievement goals. Darnon, Muller, Schragger, Pannuzzo, and Butera (2006) indicated that performance goals significantly predicted the reported amount of self-competence. According to Elliot and Church (1997), PAv goals are primarily a function of low competence perceptions. In contrast, self-concept and self-esteem are variables that are clearly associated with achievement goals (McGregor & Elliot, 2002). Pajares, Britner, and Valiante (2000) reported that PAp goals were associated positively with self-concept and PAv goals were associated negatively with self-concept.

The relationship between achievement goals and physical self-perceptions of adolescent athletes was examined. It was hypothesized that three physical self-perceptions, that is, sports competence, global physical self-concept, and self-global esteem would be predictors of four achievement goals. It was also thought that knowledge obtained from this study regarding the characteristics of achievement goals and physical self-perceptions would make a useful contribution to motivation in sport research.

Method

Participants

Participants comprised 208 adolescent athletes of whom 120 were female ($M \pm SD = 16.33 \pm 0.47$) and 88 male ($M \pm SD = 16.38 \pm 0.49$) with a mean of age of 16.35 ± 0.48 years. Participants, who took part in handball and volleyball

competition at a regional level in Adana, Turkey, reported that their sport experience was 4.00 ± 2.41 years, and they trained for 3.59 ± 1.75 days per week.

Measures

Achievement goals. The 2 x 2 Achievement Goals Questionnaire for Sport (2 x 2 AGQ-S; Conroy, Elliot, & Hofer, 2003) that has been adapted for use in Turkish culture by Kazak Cetinkalp (2009) was used to measure athletes' achievement goals. The questionnaire has four subscales: mastery-approach, mastery-avoidance, performance-approach, and performance-avoidance. Answers were given on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The reliability and validity for Turkish athletes were reported by Kazak Cetinkalp (2009).

Physical self-perceptions. The Physical Self-Description Questionnaire (PSDQ) was developed by Marsh, Richards, Johnson, Roche, and Tremayne (1994) and has been adapted for use in the Turkish culture by Aşçı (2000). The questionnaire is a multidimensional instrument with 11 subscales: strength, body fat, physical activity, endurance/fitness, sports competence, coordination, health, appearance, flexibility, global physical self-concept, and global self-esteem. Sports competence, global physical self-concept, and global self-esteem subscales were used in this study to determine athletes' physical self-perceptions. The construct validity and internal reliability of the PSDQ have been successfully demonstrated within a physical activity context (Aşçı, 2000).

Data Analysis

Firstly, descriptive statistics in this study were compiled. Then, the Pearson product-moment correlations and regression analysis with stepwise methods were conducted to examine the relationship between achievement goals and physical self-perceptions.

Results

Descriptive Statistics

The descriptive statistics and independent *t* test results for each variable are displayed in Table 1. All variable scores were generally above average. In terms of gender differences, the results showed that only the MAv achievement goal was significantly different between female and male athletes ($t = 2.54, p < .05$). The female athletes' MAv scores were higher than male athletes'.

Table 1. *Descriptive Statistics and Independent t Test Results for each Variable*

	Total		Female		Male		<i>t</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Mastery-approach	6.37	1.23	6.37	1.31	6.37	1.14	-.00
Mastery-avoidance	4.82	1.57	5.05	1.54	4.49	1.57	2.54*
Performance-approach	5.67	1.37	5.64	1.44	5.71	1.28	-.34
Performance-avoidance	5.01	1.48	5.05	1.53	4.96	1.41	.44
Sports competence	4.53	.89	4.48	.89	4.60	.89	-.98
Global physical self-concept	4.84	.93	4.87	.93	4.80	.93	.55
Global self-esteem	3.92	.79	3.84	.78	4.02	.79	-1.64

Note: * $p < .05$

Correlation Analysis

The relationship between adolescent athletes' achievement goals and physical self-perceptions was small to moderate as shown in Table 2. The MAp goal was significantly related to sports competence and global physical self-concept ($p < .05$); the MAv goal was not significantly related to physical self-perceptions ($p > .05$); the PAp goal was significantly correlated with sports competence, global physical self-concept, and global self-esteem ($p < .01$); and the PAv goal was related to sports competence ($p < .05$).

Table 2. *Pearson Correlations Between Achievement Goals and Self-perceptions*

	Sports competence	Global physical self-concept	Global self-esteem
Mastery-approach	.16*	.16*	.06
Mastery-avoidance	.10	.12	-.05
Performance-approach	.29**	.22**	.22**
Performance-avoidance	.18*	.14	.13

Note: * $p < .05$, ** $p < .01$.

Regression Analysis

In Table 3 it can be seen that there were independent variables that contributed significantly to the MAp goal and predicted about 3% of the variance. Global physical self-concept was a positive predictor of the MAp goal ($F(1, 206) = 5.55, p < .05$). In contrast, the MAv goal was not significantly predicted by physical self-perceptions. The PAp goal was significantly predicted by sports competence ($F(1, 206) = 19.30, p < .001$). This explained 9% of the variance. Sports competence emerged as a unique significant positive predictor ($F(1, 206) = 6.51, p < .05$) for the PAv goal, accounting for 3% of the explained variance.

Table 3. *Summaries of Regression Analyses for Athletes' Achievement Goals Scores*

	R^2	β	F
Mastery-approach			
Global physical self-concept	.03	.16	5.55*
Mastery-avoidance			
ns^a	--	--	--
Performance-approach			
Sports competence	.09	.29	19.30***
Performance-avoidance			
Sports competence	.03	.18	6.51*

Notes: * $p < .05$, *** $p < .001$, ^a ns = nonsignificant.

Discussion

The purpose in the present study was to examine the relationship between achievement goals and physical self-perceptions of adolescent athletes. The results showed that female athletes have more MAv goals than male athletes. Similarly, Morris and Kavussanu (2008) found that female athletes' MAv scores were significantly higher than male athletes'. In contrast, Fouladchang, Marzooghi, and Shemshiri (2009) concluded that there was no significant difference between males and females on MAv goal orientation scores. Results gained in the present study showed that there was no significant difference between males and females in terms of MAP, PAP, and PAV goals. In contrast, Patrick, Ryan, and Pintrich (1999) found that females endorsed MAP goals significantly more than males. Pajares et al. (2000) reported that there were no gender differences in PAV goals. Middleton and Midgley (1997), who examined the relationship between goal orientation and gender for adolescent students, concluded that males demonstrated higher endorsement of PAP goals than females.

Our results indicated that MAP goals were related to sports competence and global physical self-concept. In addition, global physical self-concept was a positive predictor of MAP goals. In their studies, Conroy, Coatsworth, and Fifer (2005), and Murcia, Camacho, and Rodríguez (2008) reported that the MAP goal was positively correlated with perceived competence, and Morris and Kavussanu (2008) stated that MAP goals were positively predicted by perceived competence.

In this study, the results showed that the MAv goals were statistically unrelated to sports competence, global physical self-concept, and global self-esteem. In contrast, Baranik, Stanley, Bynum, and Lance (2010) found that MAv achievement goals were positively correlated with perceived competence. Murcia et al. (2008) indicated that perceived competence was negatively predicted by the MAv goal.

Results of this study also showed that the PAP goal was positively associated with sports competence, global physical self-concept, and global self-esteem.

Furthermore, sports competence was a positive predictor of the PAp goal. These results are consistent with those gained in other studies demonstrating the relationship between the PAp goal and self-perceptions. Pajares et al. (2000) reported that the PAp goal was positively correlated with self-concept. In addition, they found that the PAp goal was a significant predictor of self-concept and self-efficacy. Murcia et al. (2008) also determined that the PAp goal was positively associated with perceived competence. Morris and Kavussanu (2008) indicated that PAp goals were positively predicted by perceived competence.

The results of this study showed that the PAv goal was related to sports competence. Pajares et al. (2000), however, found a negative relationship between performance-avoidance and self-concept and indicated that the PAv goal was a negative predictor of self-concept and self-efficacy. Cury and Da Fonséca (2001) also reported that low levels of perceived competence were more associated with the PAv goal.

In an evaluation of the findings of this study it will be evident that sports competence is an important variable in terms of achievement goal orientations in sport. Approach goals were shown to be associated with global physical self-concept. Achievement goals are conceptualized as situation-specific perceptions about competence in relation to a particular behavior. General physical self-concept, in particular, serves as a distal influence on approach goals. Approaching a situation such as a physical activity is related to the individual's thoughts about physical self. The individual is expected to participate in an achievement environment, such as a physical activity, to the extent of his or her perception of self-competence in relation to that activity. Therefore, global physical self-concept perception is associated with athletes' adoption of approach-focused goals that encourage positive outcomes or avoidance-focused goals that prohibit negative outcomes.

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