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ORIGINAL ARTICLE

## **PHYSICAL SELF WORTH, ATHLETIC ENGAGEMENT AND GOAL ORIENTATIONS IN GREEK FEMALE ATHLETES**

### ***Abstract***

This study examined the relationship between physical self worth, athletic engagement and goal orientation in Greek female athletes. Greek female athletes (current and former) participated in the present study (N=258). Self reported questionnaires were completed examining physical self worth from Physical Self-Perception Profile, athletic engagement (confidence, dedication and vigor) and goal orientation (task, ego orientations). Results showed that athletes had similar physical self worth whether they were current athletes either they were former athletes, but athletes in individual sport had higher physical self worth than athletes in team sports. Physical self worth was predicted by confidence, commitment and ego goal orientation. It seems that sport is a context that influences physical self worth in female Greek athletes and interventions must be addressed in order to enhance positive physical self worth.

**Keywords:** Female athletes, physical self worth, engagement, goal orientation

## **Introduction**

Self-esteem or self-worth is a person's evaluation of the good or worth in his/her self-description (Whitehead, 1995). Research has linked high self-esteem to many positive outcomes and, on the other hand, low self-esteem to a number of problematic outcomes (Trzesniewski et al., 2003). Global self-esteem is divided into situation-specific, subordinate domains of self-esteem (eg, academic, physical domains) and each of these domains is further divided into sub-domains of even greater specificity (Boyd et al., 2002). It seems that young children have relatively high self-esteem, which gradually declines over the course of childhood perhaps because children view their selves unrealistically positive (Robins and Trzesniewski, 2005). As they move from preschool to elementary school they receive more negative feedback from others (teachers, parents, peers) and their self-evaluations correspondingly become more negative, a reduction that continues during adolescence (Robins and Trzesniewski, 2005).

Positive self esteem is an important factor to human development, and sports participation contributes to it (Klomsten et al., 2004). Girls participating in an aerobic dance class for 6 week reported higher physical self worth, but this increase was not stable after the end of the program (Burgess et al., 2006). Lindwall and Hassmen (2004) found that young adults who were exercising more frequently and for a longer time reported higher physical self worth, although girls had lower scores than boys. Physical self worth is also related to health behaviors. Crocker and his colleagues (2001) showed that lower physical self worth was positive related to smoking behavior and dietary restraint in young adolescent women (Crocker et al., 2001), and there was a relationship between physical activity and physical self worth (Crocker et al., 2003). In adolescents, the level of sport participation (elite, competitive, and non-athlete) was found to be positively related to physical self-esteem (Findlay and Bowker, 2009) and there was difference in global physical self esteem between non-athletes and athletes (elite and competitive). It seems that involvement in sports leads to equal positive changes in physical self esteem.

Youth engagement in extracurricular and other out-of-school activities promote increased involvement with prosocial peers, provide opportunities for achievement and decline antisocial patterns (Mahoney, 2000). Participation in highly structured leisure activities was linked to lower levels of antisocial behavior (Mahoney and Stattin, 2000). Sport is a common form of participation (Sharp et al., 2007) that seems to play important role in the development of children and youth (Petitpas and Champagne, 2000) and there are positive and negative developmental experiences (Fraser-Thomas and Côté, 2009). All the above show that the sport environment is developmentally significant because it provides important socialization opportunities and places adaptive demands

on participants that can be as important as those in other important life settings (Larson, 2000; Ryan and Deci, 2000). On the other hand, the involvement to sport environment may lead young athletes to less exploration of other meaningful life alternatives, delayed attention to carrier-related matters (Grove et al., 1997) and less social role exploration (Miller and Kerr, 2003). A lot of boys and girls participate all over the world in physical activity programs and in organized athletic programs, although girls join and continue to participate in athletic activities at lower rates than boys (Pedersen and Seidman, 2004).

Engagement has been examined recently in sport settings. Earlier research in engagement in employment contexts suggests that those employees high in engagement invest large amounts of visible attention and muscular effort (Goffman, 1961). It seems that it is the conceptual opposite of burnout and it has been advocated the promotion of engagement with one's work is the best method to prevent burnout (Schaufeli and Salanova, 2007). In sport contexts, athletic engagement is defined as a persistent, positive cognitive-affective experience in sport, characterized predominantly by confidence, dedication and vigor (Lonsdale et al., 2007). Self determination theory has been suggested as a potential basis for examining the antecedents for athletic engagement (Hodge et al., 2009). According to the theory, humans have basic psychological needs for autonomy, competence and relatedness, which must be satisfied to experience optimal well-being (Ryan and Deci, 2002). The extent to which these needs are satisfied or frustrated, will determine the degree to which positive psychological outcomes (eg. engagement) or negative psychological outcomes (eg. burnout) are experienced (Ryan and Deci, 2002).

The "satisfaction" of basic psychological needs may represent a likely motivational precursor for athletic engagement (Lonsdale et al., 2007). Athletic engagement is an enduring, relatively stable sport experience, which refers to generalized positive affect and cognitions about one's sport as a whole (Hodge et al., 2009). Hodge and his colleagues (2009) found a strong positive association between athletic engagement and flow dimensions at the global level, and a moderate to strong association between athletic engagement and flow dimensions at the dimensional level (Hodge et al., 2009). More particularly, the strongest observed associations were between the positive affect-related aspects of both constructs. Based on their findings, they concluded that positive thoughts and feelings associating with one's sport experience can be the core link between engagement and flow (Hodge et al., 2009). Lonsdale and his colleagues (2007) suggested that athletic engagement is a psychological construct of clear relevance to elite athletes. In school settings adolescent students with high skills and high motivation have higher self-reported engagement in physical activity than others (Kalaja et al., 2010). There is evidence that athletic engagement is positively associated with self-esteem development among girls (Richman and Shaffer, 2000).

Another theory through which has been largely based the explanation of children's involvement in physical activity settings is goal perspectives theory (Ames, 1992; Dweck and Leggett, 1988; Nicholls, 1989). Goal orientations differ as a function of individual differences and situational demands (Duda, 1993). In achievement settings, like sports, at least two different classes of goals predominate (Nicholls, 1984, 1989): a learning or task goal and a performance or ego goal. Today, there is extensive information about the positive role of individuals' task orientation on motivation in physical activity settings (Roberts, 1992). Task orientation reflects a tendency to judge subjective success and competence in the bases of personal improvement and mastery through effort (Dunn et al., 2002). Task-involved individuals as predicted to choose challenging tasks, exert high levels of effort, and demonstrate high levels of persistence regardless of perceived level of ability. On the other hand, an ego goal focus will result in learning and good performance only if perceived competence is high (Ames and Archer, 1988; Dweck, 1986; Dweck and Leggett, 1988; Nicholls, 1984, 1989; Roberts, 1992). The relation between goal orientations and sport performance has been widely examined, suggesting that in sports exist different goal orientations, which play an important role in sport behavior (Duda, 1993, review). Generally, research has revealed that in sport activities task oriented individuals demonstrated greater levels of intrinsic interest (Duda et al., 1995) and this orientation was positively correlated with an adaptive profile of perfectionism while ego orientation was positively associated with a maladaptive profile of perfectionism (Dunn et al., 2002), less commitment to practice, are less likely to maintain self-confidence, experience less enjoyment and satisfaction and report more competitive anxiety when their perceived ability is low (Roberts, 1992; Van Yperen and Duda, 1999; Walling et al., 1993). On the other, both task and ego orientations were positively predictors of global self-esteem and physical self-worth (Kavussanu, 2007). The way an individual evaluate competence is reflected by his goal orientation and seem particularly relevant for self esteem (Kavussanou, 2007). Studies examining relationship between goal orientations and self esteem are few and with conflict results. Kavussanu and Harnish (2000) examined the relationship between goal orientations and perceptions of athletic ability to global self worth. They suggested that high task oriented children reported significantly higher self-esteem than low oriented children. For girls specifically, low task oriented with high perceived ability reported higher self-esteem. In adolescent girls participating in physical education between task orientation and physical self worth a positive relationship was indicated, but between ego orientation and physical self worth this relation was, although positive, weak (Biddle and Wang, 2003). Newton, Detling, Kilgore and Bernhardt (2004) found that in female young adult athletes none of the constructs of achievement goal theory predicted significant amounts of variance in physical self perceptions and there was also no significant relationship between physical self worth and orientations, contrary to male young adult athletes.

In the physical domain a widely used instrument which measures perceived general physical self-worth (or global self concept) and 4 factors at the physical domain (body attractiveness physical

conditioning, sport competence and physical strength) is Physical Self Perception Profile (Fox and Corbin, 1989). There is a hierarchical structure between general self-worth and the other 4 factors. Physical self-worth is in the higher level of hierarchy. The PSPP questionnaire has been applied to many different populations: to elite athletes compared to non athletes (Asçi, 2003), to college students males and females (Hayes et al., 1999), to adolescent girls (Kowalski et al., 2003), to different cultures (Malete et al., 2008; Moreno et al., 2007), etc.

Purpose of the present study was to examine perceived general physical self-worth in Greek female athletes. It was supposed that physical self worth would be predicted by task orientation and engagement. Secondly, the present study examined differences in physical self worth between former and current female athletes, between athletes in individual and team sports. It was expected that there would be no differences in general physical self worth between former and current female athletes, as sports leads to stable changes.

## **Methods**

### ***Participants***

In the present study participated 258 Greek female athletes (current N = 163, and former N = 95). Their mean age was 19.82 years (SD=3.89). The mean age for current athletes was M =18.71 (SD = 4.11) and for former athletes the mean age was M =21.71 (SD =2.58). They participated in 15 different sports (individual sports N = 37.9%, and team sports N = 62.1%). Their mean competitive experience was 7.65 years (SD =4.23).

### ***Data collection instruments***

Self reported questionnaires were used assessing athletic engagement, goal orientation and physical self worth, and demographic characteristics (age, sport, competitive experience, being current or former athlete).

Physical self worth was assessed by using 6 items from the physical self-perception profile (PSPP: Fox and Corbin, 1989). The questionnaire was adopted in Greek population (Diggelidis, 1996). In each item participants indicate their response on a six-point scale (6= totally true for me, 1= not true for me). Lower scores indicated lower physical self worth. The internal consistency was Cronbach's alpha .83 (Table 1).

In order to assess athletic engagement (AE) the Athlete Engagement Questionnaire was used (Lonsdale et al., 2007; in Greek population Panteli, et al., 2011). The questionnaire includes 15 items, assessing three factors, enthusiasm-vigor, dedication-commitment and confidence. In each item participants indicate their response on a five-point scale (5= almost always, 1= almost never). Also, a global AE score was calculated by averaging scores across the subscales. Internal consistency is presented in Table 1.

In order to assess goal orientation questionnaire Task and Ego Orientation in Sport Questionnaire (Duda, 1989) was used. The instrument has been adapted to Greek population (Papaioannou and Macdonald, 1993; Papaioannou and Theodorakis, 1996). Following the stem "I feel most successful in my sport when..." participants indicated their responses to 13 items on a five-point scale (5= strongly agree, 1=strongly disagree). It consists of 7 items measuring task orientation (e.g., I feel most successful in my sport when... I learn new skills) and 6 items measuring ego orientation (e.g., I feel most successful in my sport when... I come first). The internal consistency was acceptable and for task was a Cronbach's alpha of .69 and for ego with an alpha of .84 (Table 1). Higher composite subscale scores reflect higher levels of the goal orientation dimension being measured.

### Design and Data Analysis

For the current athletes with the permission of the coaches meetings were conducted, in which was explained the purpose of the study, the participants were ensured for the confidence of the answers and the data were collected. For underage athletes permission was given by one of their guardians. Former athletes were contacted personally to take part in the research and complete the questionnaires individually. Initial analyses on data were conducted to provide descriptive statistics. After that, a univariate analysis was used in order to examine the influence of competitive experience, current/former participation and type of sport (individual/team sport) on physical self worth. After checking assumptions (Ntoumanis, 2001; Tabachnick and Fidell, 1996) a linear regression analysis (enter method) was conducted to evaluate how well goal orientations (task, ego) or athletic engagement (enthusiasm-vigor, confidence, dedication) predicted physical self worth.

## Results

### *Descriptive statistics*

The mean for physical self worth was higher than the median ( $M=3.16$ ,  $SD=.74$ ). In AE the mean was 12.66 ( $SD=1.95$ ). In all factors of engagement the mean was higher than the median. More particular in enthusiasm-vigor the mean was  $M=4.51$  ( $SD=.58$ ), in confidence the mean was  $M=3.89$  ( $SD=.75$ ) and in dedication-commitment the mean was  $M=4.25$  ( $SD=.79$ ). About goal orientations, in task orientation the mean was higher than the median as  $M=4.20$  ( $SD=.54$ ), while in ego orientation the mean was slightly over the median,  $M=2.94$  ( $SD=.95$ ). Competitive experience was more than 7 years ( $M=7.65$ ,  $SD=4.23$ ). All means and standard deviations are presented in Table 1.

**Table 1.** Descriptives (M, Sd) and Cronbach's  $\alpha$  in athletic engagement, goal orientations and physical self worth.

	Variables	$\alpha$	M	Sd
Athletic engagement (AE)	enthusiasm-vigor	.92	4.50	(.59)
	Confidence	.86	3.89	(.75)
	Dedication-	.86	4.24	(.78)

	commitment			
	AE (total)	.92	12.66	(1.95)
Goal orientation	Task	.69	4.22	(.53)
	Ego	.84	2.96	(.94)
Physical self- worth		.83	3.16	(.75)

*Physical self- worth*

Differences in physical self worth between athletes participating in individual sports and athletes participating in team sports were examined by using Analysis of Variances. The results revealed that there was a significant difference between individual and team sports in physical self-worth,  $F(1,168) = 4.54, p < .05$ . Participants in individual sports had higher mean than participants in team sports (individual:  $M = 3.25, SE = .09$ , team:  $M = 3.02, SE = .08$ )

*Prediction of physical self worth from athletic engagement*

Correlation between independents variables were not high ( $.50 < r < .62$ ). The linear combination of measures could significantly predict physical self worth and twenty-one percent of the variance could be accounted (Table 2). From the predictors contributed significantly to the prediction of physical self worth confidence ( $\beta = .55, t = 7.34, p < .001, part = .42$ ) and commitment ( $\beta = -.22, t = -2.70, p < .01, part = -.16$ ). It seems that commitment decreases the probability of physical self worth. Enthusiasm-vigor did not contribute to the prediction of physical self-worth ( $p = .82$ ).

**Table 2.** Regression coefficients and R, R squared of physical self worth for all participants by athletic engagement.

<i>Predictor Variables</i>		<b><math>\beta</math></b>	<b>t</b>	<b>part</b>	<b>p</b>
	<i>Enthusiasm-vigor</i>	-.02	.23	.01	ns
	<i>Confidence</i>	.55	7.94	.42	<.001
	<i>Dedication-commitment</i>	-.22	-2.70	-.16	<.01
R = .46, R <sup>2</sup> = .21, F(3, 237) = 20.92, p < .001					

ns: non significant

*Prediction of physical self worth from goal orientations (task, ego)*

Correlation between independents variables was not high ( $r = .11$ ). The linear combination of measures could significantly predict physical self worth, but only 5% of the variance could be accounted (Table3). Ego orientation contributed significantly to the prediction of physical self worth (beta=.19, t=2.72, p < .01, part = .19), task orientation did not contribute to the prediction of physical self worth (beta = .10, t = 1.41, p > .01, part = .10).

**Table 3.** Regression coefficients and R, R squared of physical self worth for all participants by goal orientations.

<i>Predictor Variables</i>		$\beta$	t	part	p
	Task orientation	.10	1.41	.10	ns
	Ego orientation	.19	2.72	.19	<.01
$R = .22, R^2 = .05, F(2, 197) = 5.17, p < .01$					

ns: non significant

### Discussion

The present study examined physical self worth in Greek female athletes. Research's hypotheses were partially confirmed. Self worth was predicted by confidence and commitment, and was also predicted only by ego orientation and not task orientation. Examining physical self worth, it was found that former and current athletes did not differ but there were differences between athletes in individual and team sports. Athletes in individual sports reported higher physical self worth. The hypotheses of the study were partially confirmed.

As children get older, self physical worth decreases (Hagger et al., 2010). Exercise and physical activity have a positive effect on physical self worth. Teenage athletes reported stronger physical self perceptions compared to other populations (Welk et al., 1995). But concerning females, it seems they have lower physical self worth than males in adolescent and late adolescent years (Hagger et al., 2010), and in young adulthood (Lindwall and Hassmen, 2004). In the present study it was found that there was a difference between athletes in individual and in team sport but not between former and current athletes. Athletes in individual sports had higher self worth than athletes in team sport. These findings are conflict to other studies, in which although participated only adolescent athletes (eg. Pedersen, and Seidman, 2004; Slutzky and Simpkins, 2009). Slutzky and Simpkins (2009) found that as adolescents spent more time in team sport activities sport self-worth increases and this was associated with increase in self-esteem and adolescent who spent more time in individual sport activities did not increase sport self-worth. Their explanation was that children in team sports felt better about their sport abilities, which in turn, was positively associated with self-esteem (Slutzky and Simpkins, 2009). Our participants were older than those in the above studies and athletes in individual sports had higher competitive experience than athletes in team sports. Participants in our study were also elite athletes. An athlete, who trains and competes in an individual sport relies more on



herself and this maybe increases her physical self worth. Probably, the longer an athlete participates in a sport the higher confidence she conquer. Marsh (1998) suggest that as athletes perform at higher levels, their skills increase and that increase in self efficacy may translate into increase of global self-esteem.

Confidence and commitment contributed to the prediction of self worth. Self confidence is a reflection of someone's perceptions about his capacity to successfully meet challenges in physical activity and sport (Moreno et al., 2007). As physical activity increases, levels of confidence seem to increase also, and the frequency of participation in physical activity affects self-confidence (Moreno et al., 2007). The findings of the present study are consist to the above conclusion, as participant athletes of the present study were in specializing and (many of them) in investment years, according to Côté's (1999) three distinct stages of participation. During these stages it is possible athletes to use psychological skills to enhance performance and this use increases self confidence. For example the use of self-talking in tennis players enhanced self-confidence (Hatzigeorgiadis et al., 2009). Brustad and his colleagues (2004) mentioned that commitment was synonymous to the level of psychological attachment individuals have to their sport involvement. Athletes in individual sports reported more years of training and competing, so they were involved in their sport for a longer time. In a way they were more commitment to their sport than athletes in team sport. It must be mentioned that in the present study, dedication-commitment decreases the probability of physical self worth. Participating in a competitive sport, results engagement to the sport but this is not stable as Hodge et al. (2009) assumed, especially feelings and commitment. As in the present study both current and former athletes participated, so it can be assumed that after athlete's disengagement the positive correlation between participation and engagement no longer exists. Researchers argue that sport carrier determination implies a transition during which ex-elite athletes face social, professional, and bodily changes and adjustments (Yannick et al., 2003). More researches must be designed in order to examine feelings of Greek former athletes and if/how these influences dedication-commitment.

On the other hand, self worth was predicted by ego orientation. This finding is contrary to other studies. For example, Kavussanu (2007) reported that in her study the two goals interacted with each other such that the maximum levels of physical self worth were achieved when individual was high on both task and ego orientation. In her study participated secondary students participating in physical education lessons, not athletes. In another study it was found that task orientation influenced significant global self esteem (Kavussanu and Hamish, 2000). More precise, high task oriented children reported significantly higher self-esteem than low task-oriented children and they were children both. But also participants were children attending summer sports camps, not competitive sports and they were both boys and girls.

### **Conclusions**

More studies should be addressed to female athletes to investigate more particularly the relationship between physical self worth and goal orientation, including 3 goal orientations in sport<sup>87</sup>

domain (task, performance avoidance, performance approach), as the distinction between approach and avoidance goals were beyond the research questions. As Bowker and his colleagues (2003) mentioned, sports participation does predict self-esteem and the type of sports in which they participate, is a moderating factor. So, it must be examined self-esteem separately in individual sports and team sports. Female athletes are a target group toward which should be addressed more attention by sport researchers. Athletic engagement can predict physical self worth. Future researches should examine the relationship between athletic engagement and global self worth, so implications toward training could be designed in order to enhance self esteem of girls. Also, differences should be examined between athletes participating in competitive and non competitive sports.

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