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Relationship Between Task and Ego Orientation and the Perceived Purpose of Sport Among High School Athletes

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This study examined the relationship between an athlete's goal perspective (i.e., task or ego orientation) and the perceived purpose of sport among male and female high school athletes. The sport-specific measure of task and ego orientation was found to have a stable factor structure and high internal consistency. Factor analysis of the Purpose of Sport Questionnaire revealed seven factors: sport should (a) teach the value of mastery and cooperation, (b) show people how to be physically active for life, (c) make good citizens, (d) make people competitive, (e) help individuals obtain a high status career, (f) enhance self-esteem, and (g) show people how to get ahead and increase their social status. Results indicated that the importance placed on skill mastery and personal improvement in sport (task orientation) positively related to the beliefs that sport should enhance self-esteem and teach people to try their best, cooperate, and be good citizens. Ego orientation was a positive predictor of the view that sport involvement should enhance one's self-esteem and social status.

Recent cognitive theories of achievement motivation have underscored the relevance of goal perspectives to our understanding of behavior in achievement contexts (Ames, 1984; Dweck & Elliott, 1983; Maehr & Braskamp, 1986; Nicholls, 1984a, 1984b, 1989). Although different theorists have different labels, this line of research is primarily concerned with the social, psychological, and behavioral antecedents and consequences of two goal perspectives, namely a task orientation and an ego orientation. It is assumed that these two orientations reflect the criteria individuals use to subjectively define success and failure in achievement settings. Nicholls (1984a, 1984b) and Dweck (Dweck & Elliott, 1983), in particular, suggest that task and ego orientation entail distinct ways of judging or construing one's level of demonstrated competence.

When one is task oriented, task mastery and/or personal improvement reflect high competence and therefore subjective success. According to Nicholls (1984a; Nicholls & Miller, 1984), perceived ability (and perceptions of goal accomplish-

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ment) is self-referenced in a task orientation. An ego orientation, by contrast, is other-referenced and entails the demonstration of a normative conception of ability (Nicholls, 1984a). That is, for an individual with a strong ego orientation, subjective success means being better relative to others on a normatively challenging task.

An important tenet of Nicholls' (1984a, 1984b) and Dweck's (Dweck & Elliott, 1983) theories of achievement motivation concerns the relationships between an individual's goal perspective, levels of perceived ability, and subsequent behavior. It is argued that a task orientation corresponds to positive achievement behaviors and the enhanced probability that a person will view himself/herself as competent. Maladaptive behaviors are predicted to relate to an ego orientation, particularly when an individual's perceived ability is low. Research in the academic domain has supported these predicted relationships (Butler, 1987, 1988, in press; Elliott & Dweck, 1988; Jagacinski & Nicholls, 1984, 1987; Miller, 1985).

Drawing from this literature, sport psychologists have advocated the value of considering differences in goal perspective in the study of behavior and experiences in the athletic context (Duda, 1987, 1989; Gill, 1986; Roberts, 1984; Vealey, 1986). Sport research has supported the existence and salience of task and ego orientations among participants and nonparticipants (Duda, 1986a, 1986b; Ewing, 1981; Gill, 1986). Although much more work needs to be done in this area, studies in the physical domain have also provided evidence for the hypothesized links between goal perspective and achievement behaviors such as performance (Burton, 1985; Hall, 1988), participation, persistence, and the intensity of involvement (Duda, 1988a, 1988b; Duda & Tappe, 1988; Duda, Smart, & Tappe, in press; Tappe, Duda, & Ernwald, in press).

Goal Perspectives and Potential Value Socialization

Recent research in the educational domain has indicated that the goal perspectives of students also correspond to their perceptions concerning the purposes of education in general (Nicholls, Patashnick, & Nolen, 1985; Thorkildsen, 1988). In the study by Nicholls and his colleagues, 9th and 12th grade students were administered a questionnaire assessing their degree of task and ego orientation in the classroom and their beliefs concerning what they felt was "a very important thing school should do." Factor analysis of the belief items revealed four factors reflecting two very different views of the values and benefits of receiving an education. In one view, education was assumed to be a means to an end, namely wealth and status. In the second view, education was conceived to be an end in itself. The perceived purposes of school, in this case, were to allow people to understand and master the material, enhance their desire to continue learning, and make people into responsible citizens who can serve their community.

The results indicated there was a stronger relationship between ego orientation and the belief that education should lead to wealth and status than was found in the case of task orientation. By contrast, higher positive correlations were observed between task orientation and the beliefs that school should enhance one's social commitment, understanding, and motivation to continue learning than between ego orientation and these three perceived purposes of education. These findings support the view that there is a conceptually coherent relationship between students' personal goals and their "views about what schools ought to accomplish"

(Nicholls et al., 1985). Further, the results of work by Nicholls and his colleagues suggest that there might be a link between an individual's motivational orientation in a particular achievement setting and the potential value socialization inherent in that setting.

To date, the relationship between goal perspectives and the perceived purposes that sport should serve among interscholastic athletic participants has not been examined. As is the case in the educational domain, the perceived values and benefits of sport participation can be viewed as being materialistic and individualistic (e.g., fame and fortune), intrinsic to the activity itself (e.g., becoming physically fit), and/or linked to the development of social responsibility (e.g., learning how to work with and respect others). One might expect that beliefs concerning what sport should accomplish would correspond to whether the athlete focuses on personal improvement and mastery (a task orientation) or beating others and competitive outcomes (an ego orientation) while participating in sport.

Within the context of interscholastic sport, it has been assumed that there are positive values to be incurred among young people as a function of participation in sport. Two of the major arguments for the inclusion of competitive sport within the school system are the assumptions that athletic involvement builds character and that it fosters the educational aims of the school. Systematic and well-controlled studies examining the first assumption have questioned its validity. In general, investigations of children and adolescent sport participants and nonparticipants have found the former to be lower in sportsmanship and moral development, less altruistic, and more aggressive (e.g., Blair, 1985; Bredemeier, Weiss, Shields, & Cooper, 1986; Kleiber & Roberts, 1981; Silva, 1983; Webb, 1969). This trend becomes even more pronounced as a function of years of competitive sport involvement and is especially true in the case of males.

With regard to the functional argument that assumes interscholastic sport involvement fosters academic achievement, the research findings indicate that this issue is very much in debate (Knicker, 1974; McPherson, 1987). In general, studies that support the positive contribution of interscholastic athletic participation to a student's academic accomplishments are few and do not provide evidence for a cause/effect explanation (Coakley, 1986; McElroy, 1979; Otto & Alwin, 1977). Further, the research suggests that a positive relationship between involvement in school sport and present (or future) achievement tends to emerge among white males only (Picou, McCarter, & Howell, 1987; Wells & Picou, 1987). Based on this literature, it is not surprising that the interscholastic sport system has been criticized. It has been argued that school sports have not been an important contributor to educational goals because of a prevailing overemphasis on winning rather than on individual development (Coleman, 1961; Eitzen, 1976).

In sum, previous research indicates that involvement in competitive school sport may be linked to a negative value socialization and can run counter to the educational goals of the school system. In the present investigation, the views of student-athletes concerning the purposes and consequences of athletic involvement were determined. Moreover, this study examined the degree to which the perceived purposes of sport participation corresponded to the student-athlete's personal motivational orientation in the athletic domain.

The purpose of this study was to replicate the work of Nicholls and his colleagues (1985) in the interscholastic athletic setting. That is, this investigation determined whether athletes' views concerning the purposes sport should serve

relate to their goal perspectives. It was hypothesized that an ego orientation would be associated with the belief that the purposes of sport involvement are primarily extrinsic and individualistic (e.g., enhancing one's social status). By contrast, it was predicted that task orientation would relate to the view that sport participation is important for its own sake and that athletic involvement fosters prosocial characteristics (e.g., being a responsible citizen, being considerate of others). Drawing from the literature which suggests that goal perspectives (e.g., see Duda, 1986a, 1988a; Ewing, 1981; Gill, 1986) and the attitudinal and value correlates of sport participation vary by gender, a secondary purpose of this study was to examine whether male and female high school athletes differ in their degree of task and ego orientation and the perceived purposes of sport.

Method

Subjects

The subjects in this study were 128 male and 193 female varsity interscholastic athletic participants from six high schools in a midwestern community. All were white and primarily from a middle-class background. The mean age for males and females was 17.8 and 17.1 years, respectively. The students were in the 11th or 12th grades and were participants in various interscholastic sports including basketball (38.3%), track and field (23.0%), tennis (15.9%), softball (12.8%), and other activities (9.0%).

Procedure

After permission was received from the coach of each team, questionnaires that took approximately 15 minutes to complete were administered to the subjects in a group setting. The athletes were told that participation in this study was voluntary and that their responses would be anonymous. They were encouraged to answer as they honestly felt and to ask questions if there was any confusion concerning instructions and/or the clarity of the items in the inventory.

Measures

Task and Ego Orientation in Sport Questionnaire. The measure used in the present study (i.e., the Task and Ego Orientation in Sport Questionnaire, or TEOSQ) was a modified, sport-specific version of the inventory developed by Nicholls and his colleagues to assess task and ego orientation in the academic context (Nicholls, 1989).[1] The subjects were requested to think of when they felt most successful in their sport and to respond to 15 items reflecting task oriented and ego oriented criteria. Responses were indicated on a 5-point Likert scale (1=strongly disagree, 5=strongly agree).

Purpose of Sport Questionnaire. A 60-item questionnaire assessing the various purposes of sport participation was developed for this study. The items (shown in Table 3) were generated from relevant questions contained in the Purposes of Schooling Questionnaire (Nicholls et al., 1985; Thorkildsen, 1988), a review of the literature on the values and benefits associated with youth sport involvement, and the open-ended responses provided by high school students in a pilot investigation. Responses to the stem "A *very important* thing sport should do" were indicated on a 5-point Likert scale (1=strongly disagree, 5=strongly agree).

Results

Task and Ego Orientation Questionnaire

The stability of the factor structure of the TEOSQ was examined across two subsamples in the present study. The first subsample consisted of all male and female subjects who participated in the sport of basketball ($n=123$).[2] The second subsample comprised the remaining subject pool ($n=198$).

Principal-components factor analyses (followed by both oblique and orthogonal rotations) were conducted on the responses to the 15-item orientation questionnaire for Sample 1. Two factors reflecting a task and ego orientation were revealed in each analysis. A minimum .4 factor weight was required before a specific item was considered to load on a factor. Because of the similarity in item loadings and the fact that the intercorrelation between the two factors was very low ($r=.03$), the results from the factor analysis with an orthogonal rotation only are presented (see Table 1).

The Cronbach alpha coefficients for the six-item task and ego orientation subscales that emerged from the factor analysis were .82 and .89, respectively. Thus, based on the data obtained from Sample 1, the task and ego orientation subscales demonstrated acceptably high internal consistency.

Principal-components factor analyses (oblique and orthogonal rotations) were conducted on the responses provided by Sample 2. The results from both analyses indicated that the Task and Ego Orientation in Sport Questionnaire has a stable factor structure. Specifically, as can be seen in Table 2, two dimensions emerged with the same items loading on the ego and task orientation factors, as was

Table 1

Structure Matrix Coefficients for Task and Ego Orientation Factors in Sample 1 (Orthogonal Rotation)

Item	Factor 1 Task involvement	Factor 2 Ego involvement
Learned a new skill	.799	
I work really hard	.771	
Do my very best	.758	
Something I learn	.756	
Skill I learn feels right	.736	
Learn something fun	.642	
Others can't do as well		.844
I'm the best		.815
Others mess up		.799
Do better than friends		.793
Score most points		.767
Only one who can do skill		.689
Eigenvalue	4.29	3.99
Percent variance	42.4	40.4

Table 2

Structure Matrix Coefficients for Task and Ego Orientation Factors in Sample 2 (Orthogonal Rotation)

Item	Factor 1 Ego orientation	Factor 2 Task orientation
I can do better than my friends	.811	
Others can't do as well as me	.801	
I'm the best	.769	
I'm the only one who can do the play or skill	.734	
Others mess up and I don't	.720	
I score the most points	.693	
Something I learn makes me want to go and practice more		.745
Skill I learn really feels right		.691
I do my very best		.636
I work really hard		.627
I learn a new skill and it makes me want to practice more		.599
I learn something that is fun to do		.459
Eigenvalue	4.19	2.56
Percent variance	38.8	28.7

observed in Sample 1. Once again, there was a low correlation between the task and ego orientation factors ($r = .12$). The Cronbach alpha reliability coefficients for the task and ego orientation scales were .62 and .85, respectively.

Purpose of Sport Questionnaire

Principal-components factor analyses (followed by both oblique and orthogonal rotations) were conducted on the response of all 322 subjects to the 60 items contained in the Purpose of Sport Questionnaire.[3] Because of the high intercorrelations among the seven factors that emerged (see Table 4), the results of the factor analysis followed by an oblique rotation are reported in Table 3. Factor 1, labeled mastery/cooperation, reflected those items indicating that sport should teach people the importance of trying their best, teamwork, and sportsmanship. The second factor, physically active lifestyle, comprised items indicating that sport should help people to be active and fit for life. Factor 3 captured those attributes that constitute a good citizen. Items indicating that sport should make people competitive loaded on Factor 4. Factor 5 comprised items suggesting that sport participation will help an individual obtain a high status career. The belief that sport involvement enhances one's self-esteem was reflected in the items loading on Factor 6. The final factor, labeled social status/getting ahead, comprised items indicating that sport should increase a person's popularity and help him/her move up the social ladder.

The correlations among the seven factors are reported in Table 4. Moderately high positive correlations ($r > .5$) were observed between the mastery/cooperation

Table 3

Structure Matrix Coefficients for the Purpose of Sport Factors

Factor 1—Mastery/Cooperation (Eigenvalue = 12.06, % variance = 21.6)	
.777	Teach us to be satisfied when we tried our best
.608	Show us that success means always trying our best
.520	Learn what is meant by teamwork
.482	Give us an opportunity to have fun
.480	Teach us to work cooperatively with others
.445	Teach us to be a good sport
.429	Teach us to follow rules
Factor 2—Physically Active Lifestyle (Eigenvalue = 6.11, % variance = 14.1)	
.875	Teach us how to exercise
.872	Keep people fit
.622	Show us how we can be physically active all our lives
.535	Teach us how to keep our bodies healthy
.456	Teach us to respect our bodies
Factor 3—Good Citizen (Eigenvalue = 2.69, % variance = 10.2)	
.784	Teach us to sacrifice pleasure and work to do the right thing
.749	Make us loyal
.729	Prepare us for jobs that will allow us to help others
.719	Teach us to respect authority
.716	Prepare us to do things we have to, even if we don't want to
.569	Make us responsible law-abiding citizens
.522	Prepare us for jobs in which we can serve the community
Factor 4—Competitiveness (Eigenvalue = 2.28, % variance = 9.9)	
.807	Teach us to be aggressive
.790	Make us mentally tough
.585	Teach us the "killer instinct"
.556	Teach us to do what is necessary to be the best around
.545	Help us improve our skills so that we can be the best
.502	Teach us to compete with others
.478	Show us how to do what is necessary to win
.466	Prepare us for a life in which "winning is everything"
Factor 5—High Status Career (Eigenvalue = 1.57, % variance = 8.6)	
.822	Give us the chance to get a college education
.820	Help us get into the best colleges
.710	Prepare us to reach the top in our jobs
.650	Help us move into a job which pays good money
.629	Give us a chance to be a professional athlete
.543	Give us the skills that will get us top jobs
Factor 6—Enhance Self-Esteem (Eigenvalue = 1.31, % variance = 8.4)	
.705	Make us feel important
.642	Give us the chance to feel like a champion
.586	Help us to keep working in spite of obstacles
.571	Teach us to set high standards for our own work
.557	Give us self-confidence
.473	Make us into winners

(cont.)

Table 3 (cont.)

Factor 7—Social Status/Getting Ahead (Eigenvalue = 1.28, % variance = 8.2)	
.827	Weed out those who don't have what it takes
.708	Give us the chance to be friends with popular kids
.652	Help us be popular among our friends
.561	Give us status among our peers
.559	Show us how to be better than most people
.493	Teach us how to bend the rules when necessary
.401	Give us the chance to be rich and famous

Table 4

Correlations Among the Purpose of Sport Subscales

	Mastery/ cooperation	Active lifestyle	Good citizen	Competi- tiveness	High status career	Self- esteem	Social status
Mastery/cooperation	—						
Active lifestyle	.50	—					
Good citizen	.41	.38	—				
Competitiveness	.26	.28	.39	—			
High status career	.08	.25	.40	.43	—		
Enhance self-esteem	.41	.48	.51	.61	.47	—	
Enhance social status	.32	.06	.04	.21	.51	.17	—

and the active physical lifestyle factors and the high status career and social status/ getting ahead dimensions. Further, the belief that sport enhances self-esteem was positively related to the view that sport involvement makes us more competitive and teaches us to be good citizens. The internal consistency of each of the seven scales was determined. The Cronbach alpha coefficients were found to be relatively high, ranging from .75 to .83.

Gender Differences

Independent sample t tests were conducted to examine whether males and females differed in their goal perspectives. Scale means were calculated and, as can be seen in Table 5, females were significantly higher in task orientation than males, $t(305)=2.29$, $p<.03$. On the other hand, males were significantly higher in ego orientation than females, $t(298)=2.73$, $p<.01$.

Table 5

Observed Means and Standard Deviations for Each Goal Perspective and Purpose of Sport Subscale by Gender

	Males	Females
Goal perspective		
Task orientation	4.28 (.47)	4.45 (.80)*
Ego orientation	2.89 (.87)	2.59 (.96)**
Purpose of sport		
Mastery/cooperation	4.26 (.47)	4.42 (.40)**
Fitness	4.19 (.53)	4.21 (.53)
Good citizen	3.86 (.54)	3.75 (.65)
Competitiveness	3.75 (.62)	3.43 (.57)***
Career status	3.39 (.77)	3.02 (.68)***
Enhance self-esteem	4.18 (.49)	4.09 (.50)
Enhance social status	2.49 (.63)	2.10 (.57)***

*$p < .05$; **$p < .01$; ***$p < .001$.

Because of the degree of interrelationship among the seven purpose-of-sport subscales, a one-way MANOVA was used to determine whether gender differences exist. Seven scale means were calculated and a significant gender effect emerged, $F(7,278)=6.71$, $p<.001$. As can be seen in Table 5, univariate analyses of variance indicated that females perceived mastery/cooperation to be a more important purpose of sport than did males, $F(1,285)=11.4$, $p<.001$. However, male students believed enhanced competitiveness, $F(1,285)=13.8$, $p<.001$, social status, $F(1,285)=30.8$, $p<.001$, and high status career opportunities, $F(1,285)=15.9$, $p<.001$, to be more important purposes of sport participation than did female students.

Relationship Between Goal Perspectives and Perceived Purpose of Sport

Simple correlations were determined between the means of the task and ego orientation subscales and the mean scores of the seven purpose-of-sport subscales. This was done for all subjects and also by gender. As shown in Table 6, a consistent pattern of relationships emerged. Task orientation was positively correlated with the mastery/cooperation, active physical lifestyle, good citizen, and enhance self-esteem scale means and negatively correlated with the social status/getting ahead subscale in the case of all subjects, and for males especially. A significant positive correlation was observed between task orientation and the competitiveness and high status career scales among the male athletes only.

By contrast, ego orientation was positively correlated with the competitiveness, high status career, enhance self-esteem, and social status/getting ahead subscales. There was also a positive, albeit weak, relationship between ego orientation

Table 6

Simple Correlations Between Task and Ego Orientation and the Purpose of Sport Subscales for All Subjects, Males and Females

	Task orientation			Ego orientation		
	All Ss	Males	Females	All Ss	Males	Females
Mastery/cooperation	.32***	.43***	.27***	−.02	.03	−.00
Active lifestyle	.26***	.49***	.17**	.11*	.17**	.10
Good citizen	.17**	.47***	.10	.00	.00	−.01
Competitiveness	.12*	.21***	.14	.25***	.28***	.20**
High status career	.06	.21***	.04	.18**	.11*	.18**
Enhance self-esteem	.24***	.43***	.19**	.23***	.31***	.18**
Enhance social status	−.14**	−.17**	−.10	.28***	.38***	.17**

*$p<.05$; **$p<.01$; ***$p<.001$.

and the active lifestyle mean score. In general, the significant correlations between ego orientation and the purpose-of-sport subscales were higher among males.

Canonical analysis was employed to determine the relationship between goal perspectives and the seven purpose-of-sport subscale means. Two significant canonical functions emerged (Wilks' lambda = .734; canonical correlations were .39 and .33 for Functions 1 and 2, respectively). As shown in Table 7, there was a high, positive loading for task orientation and a low to moderate negative loading for ego orientation on Function 1. This goal perspective was negatively related to the belief that sport should enhance one's social status, and positively related to the view that sport should foster an individual's cooperative skills and desire for personal mastery. The canonical loadings in the case of Function 2 indicated that high ego orientation (and a low to moderate emphasis on task orientation) was associated with a greater endorsement of the enhanced self-esteem, social status, and competitiveness consequences of sport participation and less emphasis on the potential benefit of sport to foster one's being a good citizen.

Because of the observed gender differences in goal perspectives, perceived purposes of sport, and the correlations between these two sets of variables, separate canonical analyses were conducted for males and females. Results of the canonical analysis of the data obtained from male athletes can be seen in Table 8. Two significant functions emerged (Wilks' lambda = .421; canonical correlations were .66 and .51 for Functions 1 and 2, respectively). The canonical loadings on Function 1 indicated that a strong, positive task orientation (and a moderate, negative ego orientation) was associated with less emphasis placed on the social status ramifications of sport involvement and an endorsement of the belief that sport should enhance a person's future career status. Ego orientation, and to a lesser degree task orientation, loaded positively on Function 2. This goal perspective related positively to the view that sport should improve one's self-esteem and social status, and related negatively to the belief that sport should foster an individual's subsequent career opportunities.

Table 7

Canonical Loadings: Goal Perspectives and Purpose of Sport (all Subjects)

	Function 1	Function 2
Goal perspective		
Task orientation	.937	.350
Ego orientation	−.381	.925
Purpose of sport		
Mastery/cooperation	.443	.009
Active lifestyle	.124	.260
Good citizen	.244	−.386
Competitiveness	.191	.337
High status career	.063	−.092
Enhance self-esteem	.051	.628
Enhance social status	−.773	.350

Table 8

Canonical Loading: Goal Perspectives and Purpose of Sport (Males Only)

	Function 1	Function 2
Goal perspective		
Task orientation	.951	.341
Ego orientation	−.471	.894
Purpose of sport		
Mastery/cooperation	.087	−.012
Active lifestyle	.214	.369
Good citizen	.381	−.297
Competitiveness	−.075	.194
High status career	.440	−.517
Enhance self-esteem	.098	.790
Enhance social status	−.844	.448

As shown in Table 9, the canonical analysis of the responses provided by the female athletes revealed two significant functions (Wilks' lambda=.822; canonical correlations were .33 and .28 for Functions 1 and 2, respectively). With respect to Function 1, a high, positive loading was observed in the case of task orientation and a low to moderate positive loading was revealed for the ego orientation subscale. Among the female athletes, this goal perspective positively related

Table 9

Canonical Loadings: Goal Perspectives and Purpose of Sport (Females Only)

	Function 1	Function 2
Goal perspective		
Task orientation	.909	−.418
Ego orientation	.399	.917
Purpose of sport		
Mastery/cooperation	.447	−.499
Active lifestyle	.144	.107
Good citizen	−.165	−.554
Competitiveness	.507	.058
High status career	.096	.415
Enhance self-esteem	.343	.401
Enhance social status	−.312	.456

to the belief that sport should enhance an individual's competitiveness as well as his/her ability to cooperate and desire to work hard. Based on the canonical loadings that emerged for Function 2, ego orientation positively (and to a lesser extent, task orientation negatively) related to the beliefs that sport should enhance a person's social status, career status, and self-esteem. Further, such a motivational orientation was negatively linked to the view that sport should foster people's contribution to society (i.e., being good citizens), cooperative skills, and interest in personal mastery.

Discussion

In recent psychology literature, cognitive theorists in the area of achievement motivation have argued that variations in goal perspectives relate to how people behave, feel, and process their competence in achievement contexts (Ames, 1984; Dweck & Elliott, 1983; Maehr & Braskamp, 1986; Nicholls, 1984a, 1984b). Nicholls (Nicholls et al., 1985; Nicholls, 1989) has taken this argument a step further and proposed that an individual's goals are somewhat consistent with his or her views about the wider purpose of the achievement activity.

Congruent with previous research in the academic domain that has supported Nicholls' contention (Nicholls et al., 1985; Thorkildsen, 1988), the present results revealed a conceptually coherent relationship between how a student defines success/failure in the achievement domain of interscholastic athletics and the perceived values and benefits of sport involvement per se. Specifically, beliefs concerning the purpose of sport among high school athletes were significantly predicted by whether the athlete focused on skill mastery and personal improvement (i.e., a task orientation) or being better than others (i.e., an ego orientation). Among all the subjects, 28% of the variance was shared between goal perspectives and beliefs concerning the perceived purpose of sport. The shared variance was 69% for males and 19% for females.

As was hypothesized, results indicated that task orientation related to the purpose-of-sport subscales tapping the prosocial characteristics associated with athletic involvement. First, athletes high in task orientation tended to believe that sport should teach people the value of trying one's best, cooperating with others, following the rules, and being a good sport (mastery/cooperation). Second, a task-oriented goal perspective was also linked to the view that sport should socialize people into being honest, respectful, and concerned citizens in society at large. Third, task orientation positively related to the belief that sport participation should enhance one's self-esteem and increase the probability that people will adopt and maintain a physically active lifestyle. Interestingly, task orientation tended to be negatively related to the view that sport should improve an individual's social status.

Consistent with the second hypothesis, ego orientation positively related to beliefs about sport reflecting the extrinsic benefits and personal gains aligned with athletic involvement. In particular, the greater the emphasis on an ego-oriented goal perspective, the greater the belief that athletics should increase one's social status and teach people how to survive and get ahead in a "dog-eat-dog world." Ego orientation was also a positive predictor of the view that sport should help a person get into college, move into top career positions, and earn more money.

Although the present sample of high school students perceived the purposes of sport to be slightly different and definitely more numerous than what has emerged in the academic context (Nicholls et al., 1985; Thorkildsen, 1988), the pattern of results observed were consistent with previous findings. As was the case in the classroom, task orientation corresponded to beliefs highlighting the intrinsic and cooperative facets of sport involvement. Moreover, based on past research and the present study, a task-oriented goal perspective appears to be compatible with the view that the athletic and academic achievement domains should foster social responsibility and the importance of personal mastery. In comparison to an ego orientation, a task orientation in sport or the classroom seems to relate to a deemphasis on the fame and fortune occasionally coupled with an education or accomplished athletic career.

The present findings seem logical, given the behavioral and achievement related cognitions that have been found to relate to task and ego orientations. That is, based on the theoretical perspectives of Nicholls (1984a, 1984b) and Dweck (Dweck & Elliott, 1983) and corresponding research, task oriented individuals should not be as concerned about moving up the social and/or career ladder because they do not process their capabilities in reference to others. Because a task oriented individual is likely to focus on an activity as an end in itself, the low and negative relationships between task orientation and the social status/getting ahead and high status career subscales should be expected.

Given that a task orientation implies that one is not primarily concerned with being the best, it is also not surprising that this goal perspective was positively correlated to the belief that sport teaches one to work with and help others. In fact, previous sport research has found that a mastery-based goal perspective tends to parallel a group consciousness (Duda, 1985, 1986a, 1988b).

As a task orientation entails an emphasis on skill mastery and an interest in an activity for its own sake, it would also be expected that a task oriented athlete might stress the inherent capacity of competitive sport to enhance lifetime physical

fitness. This finding is aligned with past sport and educational work (Butler, 1987, 1988, in press; Duda, 1988a, 1988b) that has revealed a positive relationship between task orientation and continued interest and participation.

Finally, Nicholls (1984a, 1984b) in particular argues that for task oriented individuals, greater exerted effort means greater mastery and hence greater accomplishment. That is, a task orientation means that the person does not need to perform better than others with equal effort or do as well as others without trying as hard to perceive success. Consequently, it is logically consistent that task orientation is linked to the view that sport teaches one the value of and joy in trying one's best.

On the other hand, rather than focusing on a task for its own sake, competitive outcomes would be of particular importance to someone who is ego oriented. The emphasis in this case is on getting to the top and demonstrating one's higher level of competence. Given such a goal perspective, it seems reasonable that an ego oriented person would view sport as a means to other ends such as a lucrative career or popularity. Further, with such a need to be the best, it makes sense that an ego oriented athlete would perceive that sport should show people how to "be better than others" and "bend the rules when necessary."

Based on these results, then, an ego orientation appears tied to the view that sport should teach the antisocial and seemingly undesirable ways to competitive success and help people become popular. These results have interesting implications for previous research findings which suggest that interscholastic athletics may not be a major contributor to the educational goals of the school and that competitive sport involvement is negatively correlated with the development of prosocial values (Blair, 1985; Bredemeier, 1985; Coleman, 1961; Eitzen, 1976; Silva, 1983; Webb, 1969). Specifically, the present findings suggest that it is not sport itself that should be questioned. Rather, it can be proposed that whatever problems exist stem from an athletic context that emphasizes winning at all costs and, in particular, the adoption of an ego orientation at the expense of a task orientation.

This issue becomes even more salient as a function of years of competitive involvement. Research (Chaumeton & Duda, 1988) has indicated that the ego oriented dimensions of the sport situation seem to become more pronounced as one moves from one level of competition (e.g., junior high school) to the next (e.g., senior high school). The literature also demonstrates that the dysfunctional aspects of school sport and the aggressive tendencies and unsportsmanlike attitudes of athletes, particularly males, increase with continued competitive sport participation.

One variable that continues to relate to variations in goal perspective is gender. Consistent with past research (Duda, 1986a, 1986b, 1988a; Ewing, 1981; Gill, 1986), females were more task oriented and males were more ego oriented in sport. These results suggest that there may be some distinctions in the way male and female high school athletes tend to construe their level of competence and process their success and failure experiences.

The fact that gender differences emerged in the perceived purposes of sport is also congruent with the literature on sport attitudes and values (i.e., males are higher in aggressive tendencies and lower in sportsmanship). In particular, females viewed athletics as a context that promotes working with others and the significance of trying one's best more than males did. Males, by contrast, perceived that a

major purpose of athletics was to enhance the competitive spirit and accentuate the importance of winning at all costs.

Male athletes also believed sport participation to be an important means to greater social status and career mobility. This finding suggests a sense of realism among the present subjects, as research has shown that athletic involvement is a major criteria underlying recognition and popularity among adolescent American *males only* (Coleman, 1961; Eitzen, 1976; Feltz, 1979; Thirer & Wright, 1985). Further, the success and prestige associated with sport involvement has been found to be a major factor in whatever contribution athletics makes to present and future academic and career achievement (McElroy, 1979; Otto & Alwin, 1977). In general, the positive and significant interrelationships between school sport participation, social status, and educational and occupational achievement hold for (white) males and not for females (Picou et al., 1987; Wells & Picou, 1987).

Conclusion

This research indicated that, within the achievement domain of interscholastic athletics, a conceptually consistent relationship exists between an athlete's goal perspectives and his/her views concerning the purpose of sport. The present findings were aligned with classroom-specific research and the predictions stemming from recent cognitive theories of achievement motivation.

Extrapolating from the present findings to the practical realm, if coaches, physical educators, and sport administrators want young athletes to associate sport participation with "what's in it for me?" then promoting an ego orientation seems best. However, if those who are leaders in shaping the school sport experience want young people to feel that athletics should teach people to try their best, cooperate, obey the rules, and become model citizens, then a task orientation appears warranted.

References

Ames, C. (1984). Competitive, cooperative and individualistic goal structures: A motivational analysis. In R. Ames & C. Ames (Eds.), *Research on motivation in education: Student motivation* (pp. 177-207). NY: Academic Press.

Blair, S. (1985). Professionalization of attitude toward play in children and adults. *Research Quarterly for Exercise and Sport,* **56**, 82-83.

Bredemeier, B.J. (1985). Moral reasoning and the perceived legitimacy of intentionally injurious sport acts. *Journal of Sport Psychology*, **7**, 110-124.

Bredemeier, B.J., Weiss, M., Shields, D., & Cooper, B. (1986). The relationship of sport involvement with children's moral reasoning and aggressive tendencies. *Journal of Sport Psychology*, **8**, 304-318.

Burton, D. (1985, May). *Swimming faster through the development of a performance orientation: A test of Nicholls' theory of achievement motivation.* Paper presented at the Annual Meetings of the North American Society for the Psychology of Sport and Physical Activity, University of Southern Mississippi.

Butler, R. (1987). Task-involving and ego-involving properties of evaluation: The effects of different feedback conditions on motivational perceptions, interest and performance. *Journal of Educational Psychology*, **79**, 474-482.

Butler, R. (1988). Enhancing and undermining intrinsic motivation: The effects of task-involving and ego-involving evaluation on interest and performance. *British Journal of Educational Psychology*, **58**, 1-14.

Butler, R. (in press). Interest in the task and interest in peers' work in competitive and noncompetitive conditions: A developmental study. *Child Development*.

Chaumeton, N., & Duda, J.L. (1988). Is it how you play the game or whether you win or lose?: The effect of competitive level and situation on coaching behaviors. *Journal of Sport Behavior*, **11**(3), 157-174.

Coakley, J. (1986). *Sport in society: Issues and controversies* (3rd ed.). St. Louis: Mosby.

Coleman, J.S. (1961). *The adolescent society: The social life of the teenager and its impact on education*. New York: Free Press.

Duda, J.L. (1985). Goals and achievement orientations of Anglo and Mexican-American adolescents in sport and the classroom. *International Journal of Intercultural Relations*, **9**, 131-155.

Duda, J.L. (1986a). A cross-cultural analysis of achievement motivation in sport and the classroom. In L. VanderVelden & J. Humphrey (Eds.), *Current selected research in the psychology and sociology of sport* (pp. 115-134). New York: AMS Press.

Duda, J.L. (1986b). Perceptions of sport success and failure among white, black, and Hispanic adolescents. In T. Reilly, J. Watkins, & L. Burwitz (Eds.), *Sports sciences* (pp. 214-222). London: E.&S.F. Spon.

Duda, J.L. (1987). Toward a developmental theory of children's motivation in sport. *Journal of Sport Psychology*, **9**, 130-145.

Duda, J.L. (1988a). The relationship between goal perspectives and persistence and intensity among recreational sport participants. *Leisure Sciences*, **10**, 95-106.

Duda, J.L. (1988b). Goal perspectives, participation and persistence in sport. *International Journal of Sport Psychology*, **19**, 117-130.

Duda, J.L. (1989). Goal perspectives and behavior in sport and exercise settings. In C. Ames & M. Maehr (Eds.), *Advances in Motivation and Achievement—Vol. VI* (pp. 81-115). Greenwich, CT: JAI Press.

Duda, J.L., Smart, A., & Tappe, M.K. (in press). Predictors of adherence in the rehabilitation of athletic injuries: An application of Personal Investment Theory. *Journal of Sport & Exercise Psychology*.

Duda, J.L., & Tappe, M.K. (1988). Predictors of personal investment in physical activity among middle-aged and older adults. *Perceptual and Motor Skills*, **66**, 543-549.

Dweck, C.S., & Elliott, E. (1983). Achievement motivation. In E.M. Hetherington (Ed.), *Socialization, personality, and social development* (pp. 643-691). New York: Wiley.

Eitzen, S. (1976). Sport and status in American public secondary education. *Review of Sport and Leisure*, **1**, 139-155.

Elliott, E., & Dweck, C.S. (1988). Goals: An approach to motivation and achievement. *Journal of Personality and Social Psychology*, **54**, 5-12.

Ewing, M.E. (1981). *Achievement orientations and sport behavior of males and females*. Unpublished doctoral dissertation, University of Illinois at Urbana-Champaign.

Feltz, D.L. (1979). Athletics in the status system of female adolescents. *Review of Sport and Leisure*, **4**, 110-118.

Gill, D.L. (1986). Competitiveness among females and males in physical activity classes. *Sex Roles*, **15**, 233-247.

Hall, H.K. (1988, June). *Goal setting in sport: A social cognitive perspective*. Paper presented at the Annual Meetings of the North American Society for the Psychology of Sport and Physical Activity, University of Tennessee, Knoxville.

Jagacinski, C.M., & Nicholls, J.G. (1984). Conceptions of ability and related affects in task involvement and ego involvement. *Journal of Educational Psychology*, **76**, 909-919.

Jagacinski, C.M., & Nicholls, J.G. (1987). Competence and affect in task involvement and ego involvement: The impact of social comparison information. *Journal of Educational Psychology*, **79**, 107-114.

Kleiber, D., & Roberts, G.C. (1981). The effects of sport experience in the development of social character: An exploratory investigation. *Journal of Sport Psychology*, **3**, 114-122.

Knicker, C.R. (1974). The value of athletics in schools: A continuing debate. *Phi Delta Kappan*, **56**, 116-120.

Maehr, M., & Braskamp, L. (1986). *The motivation factor: A theory of personal investment*. Lexington, MA: Lexington Books.

McElroy, M. (1979). Sport participation and educational aspirations: An explicit consideration of academic and sport value climates. *Research Quarterly*, **40**, 241-248.

McPherson, B.D. (1987). Sport in the educational milieu: Unanswered questions and untested assumptions. In A. Yiannakis, R. McIntyre, M. Melnick, & D. Hart (Eds.), *Sport sociology: Contemporary themes* (pp. 132-133). Dubuque, IA: Kendall/Hunt.

Miller, A. (1985). A developmental study of the cognitive basis of performance impairment after failure. *Journal of Personality and Social Psychology*, **49**, 529-538.

Nicholls, J. (1984a). Conceptions of ability and achievement motivation. In R. Ames & C. Ames (Eds.), *Research on motivation in education: Student motivation Vol. I* (pp. 39-73). New York: Academic Press.

Nicholls, J. (1984b). Achievement motivation: Conceptions of ability, subjective experience, task choice, and performance. *Psychological Review*, **91**, 328-346.

Nicholls, J.G. (1989). *The competitive ethos and democratic education*. Cambridge, MA: Harvard University Press.

Nicholls, J., & Miller, A. (1984). Development and its discontents: The differentiation of the concept of ability. In J. Nicholls (Ed.), *Advances in motivation and achievement: The development of achievement motivation* (pp. 185-218). Greenwich, CT: JAI Press.

Nicholls, J., Patashnick, M., & Nolen, S.B. (1985). Adolescents' theories of education. *Journal of Educational Psychology*, **77**, 683-692.

Otto, L., & Alwin, D. (1977). Athletics, aspirations and attainments. *Sociology of Education*, **42**, 102-113.

Picou, J.S., McCarter, V., & Howell, F. (1987). Do high school athletics pay? Some further evidence. In A. Yiannakis, T. McIntyre, M. Melnick, & D. Hart (Eds.), *Sport sociology: Contemporary themes* (pp. 142-146). Dubuque, IA: Kendall/Hunt.

Roberts, G.C. (1984). Achievement motivation in children's sport. In J. Nicholls (Ed.), *The development of achievement motivation* (pp. 251-282). Greenwich, CT: JAI Press.

Silva, J. (1983). The perceived legitimacy of rule violating behavior in sport. *Journal of Sport Psychology*, **5**, 438-448.

Tappe, M.K., Duda, J., & Ernwald, P. (in press). Male and female adolescents and their motivational orientations toward exercise: Personal investment preditors. *Canadian Journal of Sport Sciences*.

Thirer, J., & Wright, S. (1985). Sport and social status for adolescent males and females. *Sociology of Sport Journal*, **2**, 164-171.

Thorkildsen, T. (1988). Theories of education among academically able adolescents. *Contemporary Educational Psychology*, **13**, 1-8.

Vealey, R. (1986). Conceptualization of sport-confidence and competitive orientation: Preliminary investigation and instrument development. *Journal of Sport Psychology*, **8**, 221-246.

Webb, H. (1969). Professionalization of attitudes toward play among adolescents. In G. Kenyon (Ed.), *Aspects of contemporary sport sociology*. North Palm Beach, FL: The Athletic Institute.

Wells, R., & Picou, J.S. (1987). Interscholastic athletes and socialization for educational achievement. In A. Yiannakis, T. McIntyre, M. Melnick, & D. Hart (Eds.), *Sport sociology: Contemporary themes* (pp. 137-141). Dubuque, IA: Kendall/Hunt.

Notes

[1]This sport-specific measure of task and ego orientation was developed by J. Nicholls and the author for use in a collaborative research project that is in progress.

[2]The interscholastic basketball players in Sample 1 also completed two other short questionnaires that are unrelated to the focus of this investigation. Because this sample was also involved in a second study related to the topic of task and ego orientation, the factor structure of the TEOSQ was analyzed separately among this group of subjects. Sample 2 was comprised of subjects who were participants in this study only.

[3]Given the present sample size, the stability of the factor structure of the Purpose of Sport Questionnaire across subsamples was not examined (due to an insufficient item/subject number ratio).

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