

Competitive Orientations Among Intercollegiate Athletes: Is Winning the Only Thing?

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Abstract:

In this exploratory investigation of competitive orientations, intercollegiate athletes from a highly competitive Division I program and nonathletes from the same university completed Gill's Sport Orientation Questionnaire (SOQ) which assesses competitiveness, win and goal orientation; Vealey's Competitive Orientation Inventory (COI) which assesses the relative importance of performing well (performance) and winning (outcome) in competitive sports; and Helmreich and Spence's Work and Family Orientation Questionnaire (WFO), a general achievement orientation measure. A Gender X Athlete/Nonathlete MANOVA yielded both gender and athlete/nonathlete main effects and no interaction. The gender difference was most evident for competitiveness scores, with males scoring higher than females on competitiveness and win orientation. Athletes scored higher than nonathletes on most measures, but especially so on the sport-specific competitiveness score. Athletes also placed more emphasis on performance and less on outcome than nonathletes did. A secondary analysis compared the eight athletic teams and revealed considerable variation among teams. Generally the team differences were not gender differences but seemed to reflect the competitive structure of the activity.

Article:

Individual differences in achievement orientation and competitiveness are quite obvious among sport participants and these differences logically relate to sport achievement behaviors and success. According to both Atkinson's (1974) achievement motivation theory and more current cognitive approaches, highly achievement-oriented individuals approach achievement situations, try hard and strive for success against achievement standards, and persist in the face of failure. These same achievement behaviors should lead to success in athletics. Highly successful athletes are those who enter competitive sports and accept challenges, who set and strive for high performance standards, and who persist in those efforts until they attain their goals. Thus, highly successful athletes should be characterized by high achievement motivation. Despite the appealing logic of the relationship between achievement orientation and athletic success, sport psychology research has not demonstrated any consistent relationship between global achievement motivation constructs and sport achievement behavior.

One major shortcoming in the sport psychology research on achievement is the inadequacy of general achievement motivation measures. Over the last 10 years sport psychologists increasingly have recognized the value of sport-specific constructs and measures in their research and practice. Martens' competitive anxiety work, and particularly the development and use of the Sport Competition Anxiety Test (SCAT; Martens, 1977), illustrated the importance of sport-specific measures and initiated consideration of the unique characteristics of sport in our research and measures.

Several sport psychologists have taken sport-specific concerns to the area of achievement orientation. Ewing (1981) developed a measure of goal orientations for sport, and with her colleagues (Pemberton, Petlichkoff, & Ewing, 1986) has begun to examine the psychometric properties of her measure. Along with the development of her sport confidence inventory, Vealey (1986) developed a competitive orientation measure that assesses the degree to which an individual is oriented toward performing well (performance) or winning (outcome) in competitive sports. Recently, Gill and her colleagues (Gill, 1986; Gill & Deeter, in press; Gill, Dzewaltowski, & Deeter, 1988) developed a sport-specific, multidimensional measure of achievement orientation known as the

Sport Orientation Questionnaire (SOQ) and provided evidence for its reliability and validity. The initial work of these investigators suggests that sport-specific achievement constructs and measures will provide greater insight into sport achievement and competitive behavior than is possible with more global achievement approaches.

The primary focus of this study was to examine the competitive achievement orientations of high level intercollegiate athletes using more sophisticated sport-specific measures than had been available in the past. More specifically, Gill's SOQ and Vealey's COI, both sport-specific competitive orientation measures, and the Work and Family Orientation Questionnaire (WOFO; Helmreich & Spence, 1978), a multidimensional achievement orientation measure, were administered to male and female athletes from varied intercollegiate teams, and to male and female nonathletes from the same university.

The SOQ assesses three dimensions of sport achievement orientation: (a) competitiveness—the basic achievement orientation toward competitive sport reflected by such items as "I enjoy competing against others" and "I am a determined competitor," (b) win orientation—a specific focus on winning reflected by such items as "Winning is important" and "I hate to lose," and (c) goal orientation—a focus on personal standards reflected by items such as "I set goals for myself when I compete." Gill and her colleagues provided psychometric evidence for the stability, internal consistency, and reliability of the three factors and reported that the measure separates competitive sport participants and nonparticipants. However, the SOQ has not been used with high level athletes.

The COI assesses the *relative* emphasis that individuals place on performing well (performance) and winning (outcome) in competitive sports. Respondents rate how satisfied they would be with each of all possible combinations of performance level (very good performance, above average performance, below average performance, very poor performance) and outcome (easy win, close win, close loss, big loss), and the scoring system yields the relative proportions of variance associated with performance and with outcome. Vealey reports adequate variability among COI cells as well as acceptable test-retest reliability, and notes that COI performance relates to sport confidence and internal control.

The WOFO is a general achievement orientation measure (not sport-specific) with three primary dimensions of (a) mastery—the desire for challenge, (b) work—the desire to work hard, and (c) competitiveness—the desire to win in interpersonal competition. A fourth score, personal unconcern, reflects a lack of concern for the negative reactions of others, but Spence and Helmreich (1983) note that this score has not been useful in their work and they no longer recommend its use.

In general, the test developers have provided good evidence for the psychometric properties of the measures, but the measures have not been used to probe competitive orientations of high level athletes. The current study is an exploratory comparison of male and female intercollegiate athletes and nonathletes on both general and sport-specific achievement orientations.

Although evidence on sport-specific achievement orientations is limited, some literature suggests that athletes should be higher than nonathletes on both general and sport-specific achievement orientation. In their work with the multidimensional WOFO, Spence and Helmreich (1983) reported that varsity athletes were higher than general college students on achievement scores, and especially were higher on competitiveness. Similar results are expected in our study, but differences between athletes and nonathletes should be clearer with the sport-specific measures. Most sport psychologists (e.g., Scanlan, 1978) propose that competitiveness develops as more general achievement orientation is differentiated and directed toward specific sport activities. Thus, sport-specific measures developed to assess this directed achievement orientation should more clearly differentiate athletes from nonathletes. Indeed, previous work (Gill et al., 1988) indicates that the SOQ, and especially sport competitiveness, differentiates competitive sport participants and nonparticipants when the more general WOFO scores do not.

Previous work also suggests gender differences, with males being more competitive and win-oriented than females. Spence and Helmreich typically find males scoring higher than females on competitiveness, but do not find consistent gender differences on the other achievement dimensions. Previous work with the SOQ (Gill, 1986; Gill & Deeter, in press) consistently yields strong gender differences, with males scoring higher than females on competitiveness and win orientation but not on goal orientation.

An important subquestion is whether athletes are particularly win or goal oriented as compared to nonathletes. Certainly popular wisdom suggests that successful athletes are highly win oriented. However, some sport psychology research and many of our applied interventions suggest that a performance orientation is more appropriate. In her initial work on sport confidence, Vealey (1986) proposed that a performance orientation was associated with greater control and confidence, and thus greater athletic success. Duda (in press) recently reviewed considerable work on goal perspectives and sport behavior and concluded that athletes may not be as ego-involved and focused on win-loss outcomes as we often assume. Instead, perceived ability and task involvement, which are similar to performance orientation, seem more associated with sport achievement. Duda also notes that males emphasize ego-involved goals more than females do, adding further support for predicted gender differences in sport achievement orientation.

The second major analysis of this study compared the eight athletic teams on the achievement orientation measures. Because the literature does not suggest any specific differences, and because we sampled only one team in each sport, this was simply an exploratory analysis to see if differences between athletes and nonathletes were consistent across teams. That is, if athletes generally are high on sport achievement orientation, are all teams similarly high on competitiveness and do they exhibit similar levels of performance and outcome orientation? The use of both the SOQ and the COI, which assess sport orientation differently and rely on slightly different underlying constructs, may provide a more complete picture of athletes' sport achievement orientations.

Method

Sample

We planned to sample approximately 100 intercollegiate athletes with an even distribution of females and males across varied sports, and generally we were able to do so. Our final athlete sample included women's softball ($n=14$), swimming ($n=11$), track ($n=13$), and cross-country ($n=10$), and men's baseball ($n=16$), swimming ($n=9$), gymnastics ($n=17$), and wrestling ($n=17$). All teams were from a highly competitive Division I program and most were highly ranked at the national level. The nonathlete sample consisted of male ($n=43$) and female ($n=63$) undergraduates from varied physical activity skills classes at the same university. All liberal arts students are required to take activity classes, and approximately 90% of the undergraduates enroll in the liberal arts college, so the nonathletes are fairly representative of undergraduates. Many of these students have participated in competitive sports, thus the label nonathlete may not be absolutely accurate. Indeed, our previous research with similar samples (Gill et al., 1988) suggests that most students have competitive sport experience. However, our intercollegiate athletes clearly participate at a different level and intensity, and the athlete/nonathlete classification simply reflects that distinction.

Procedures

Head coaches of the teams and instructors of the skills classes were contacted to arrange a time to administer the questionnaires. The three measures, the SOQ, COI, and WOFO, as described in the introduction, were administered as a packet by a graduate assistant at the beginning of the class or at a team meeting. Responses were confidential and participation was voluntary, but all individuals who were contacted agreed to complete the questionnaires. Participants completed the questionnaires immediately in most cases, but with one team (men's swimming) questionnaires were distributed to be completed later and a few were not returned.

Results

The primary analysis was a Gender x Athlete/Nonathlete (2 x 2) MANOVA on the three SOQ scores, two COI scores, and four WOFO scores. This overall analysis revealed a significant gender effect, $F(9, 199) = 4.89$, $p < .001$, an athlete/nonathlete effect, $F(9, 199) = 13.64$, $p < .001$, and no interaction.

Gender Differences

Means for males and females and univariate statistics are provided in Table 1. As the univariate F values and discriminant coefficients indicate, the strongest differences were found for the sport-specific measures, and particularly for the SOQ scores. Males scored higher than females on both competitiveness and win orientation, and females scored higher than males on goal orientation, although not significantly so ($p < .06$). With the COI scores, males scored higher on outcome orientation and females scored higher on performance orientation. With the WOFO scores, females scored higher on both mastery and work and males scored higher on competitiveness. Generally these differences replicate earlier findings (e.g., Gill, 1986; Spence & Helmreich, 1983; Vealey, 1988) and are not qualified by athlete/nonathlete status. Males are more competitive and win oriented than females are. However, females are at least as high as males on general achievement orientation and are more oriented toward performance and personal goals within sport, an orientation that may well be associated with greater confidence, satisfaction, and achievement success.

Table 1
Gender Differences on Competitive Orientations

Measure	Males		Females		Univariate F	Discriminant coefficient
	M	SD	M	SD		
SOQ						
Competitiveness	54.9	9.0	49.4	11.1	12.09***	.55
Win	22.7	4.8	19.0	5.6	23.16***	.48
Goal	25.7	3.9	26.4	3.3	3.72	-.42
COI						
Outcome	.41	.23	.30	.24	10.42***	-.11
Performance	.46	.26	.57	.27	11.20***	-.44
WOFO						
Mastery	19.4	4.1	20.4	4.1	4.91*	-.23
Work	20.6	2.9	21.2	2.5	4.19*	-.09
Competitiveness	14.7	3.0	13.5	3.4	5.23*	-.18
Pers. unconcern	9.2	2.6	9.7	2.7	2.43	-.22

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

Table 2
Athlete/Nonathlete Differences on Competitive Orientations

Measure	Athletes		Nonathletes		Univariate <i>F</i>	Discriminant coefficient
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
SOQ						
Competitiveness	58.1	6.7	45.9	10.1	98.74***	1.07
Win	22.9	4.7	18.6	5.5	32.56***	.13
Goal	27.0	3.4	25.2	3.6	14.99***	-.16
COI						
Outcome	.33	.26	.38	.24	2.92	.06
Performance	.57	.27	.47	.26	10.05***	.41
WOFO						
Mastery	20.8	3.6	19.1	4.4	10.73***	.18
Work	21.2	2.6	20.6	2.8	3.70	-.03
Competitiveness	15.0	2.8	13.1	3.4	14.56***	-.33
Pers. unconcern	9.6	2.5	9.4	2.7	.70	.13

*** $p < .001$

Athlete/Nonathlete Differences

As Table 2 reveals, the athlete/nonathlete differences are both stronger than gender differences and are more focused. As expected, athletes are more achievement-oriented and especially are more competitive than nonathletes. Athletes scored considerably higher than nonathletes on all three SOQ scores, on the COI performance orientation, and on the WOFO mastery and competitiveness scores.

Table 2 reveals two main findings of particular interest in this study. First, not only are the sport-specific measures stronger discriminators than general achievement measures but the difference is almost entirely centered on SOQ competitiveness. The discriminant coefficient of 1.07 is much higher than any others and suggests that this score alone could account for most of the difference between athletes and nonathletes. The SOQ competitiveness score reflects a basic achievement orientation toward competitive sports. In short, athletes like competitive sports and strive to achieve in competitive sports, and this orientation clearly separates them from nonathletes. Athletes also tend to be higher than nonathletes on the more specific orientations toward competitive sports and general achievement, but the athlete/nonathlete difference is not so clear-cut and there may well be more variation among athletes on these scores.

Indeed on one specific score, COI outcome, athletes scored lower than nonathletes. This leads to the second notable finding in this comparison. When specifically considering the relative emphasis on outcome and performance (COI scores), athletes place more emphasis on performance and less on outcome than do nonathletes. This lack of emphasis on outcome may well surprise some people and runs counter to much popular wisdom that suggests athletes especially focus on winning. Athletes do strive to win in competition, as reflected by their higher SOQ win orientation scores, but in terms of relative competitive orientations they place more emphasis on performance and less on outcome than do nonathletes.

Athletic Team Differences

The overall one-way MANOVA revealed that the eight athletic teams differed significantly, $F(63, 604)=2.42$, $p < .001$, on the dependent measures. Univariate analyses revealed that the teams differed significantly only on the sport-specific scores of SOQ competitiveness, $F(7, 96)=3.96$, $p < .001$, win, $F(7, 96)=6.99$, $p < .001$, goal, $F(7, 96)=3.41$, $p < .01$, COI outcome, $F(7, 96)=5.24$, $p < .001$, and COI performance, $F(7, 96)=5.58$, $p < .001$, and not on any of the WOFO scores.

Table 3 lists the eight teams, from lowest to highest, for each of the three SOQ scores. The mean for the nonathletes is also presented for comparison, but nonathletes were not included in the analysis. Newman-Keuls multiple range comparisons revealed that for SOQ competitiveness, women's swimming scored significantly lower than women's softball, track, cross-country, and men's wrestling, and that men's gymnastics scored significantly lower than men's wrestling. Although the analysis revealed team differences, readers should note that even the lowest team is considerably higher than the mean for nonathletes. This was not the case for the other SOQ scores. For win orientation, women's swimming was lower than men's baseball, women's softball, and men's wrestling, and men's wrestling was significantly higher than every other team. For goal orientation, both women's cross-country and men's wrestling were significantly higher than men's baseball.

The team listings for COI scores, presented in Table 4, reveal nearly parallel

Table 3
Athletic Team Differences on SOQ Scores

Competitiveness		Win		Goal	
Team	<i>M</i>	Team	<i>M</i>	Team	<i>M</i>
W. Swimming	51.7	W. Swimming	18.2	M. Baseball	24.3
M. Gymnastics	55.9	M. Gymnastics	21.2	M. Gymnastics	26.0
M. Swimming	56.4	W. Track	21.8	M. Swimming	26.9
M. Baseball	57.6	W. X-country	22.3	W. Track	26.9
W. Softball	59.1	M. Swimming	22.4	W. Swimming	27.1
W. Track	59.6	M. Baseball	23.8	W. Softball	27.4
W. X-country	61.2	W. Softball	24.4	M. Wrestling	28.4
M. Wrestling	62.4	M. Wrestling	27.7	W. X-country	29.6
Nonathletes	45.9	Nonathletes	18.6	Nonathletes	25.2

Table 4
Athletic Team Differences on COI Scores

Outcome		Performance	
Team	<i>M</i>	Team	<i>M</i>
W. Swimming	.14	M. Wrestling	.30
W. Track	.20	W. Softball	.53
W. X-country	.22	M. Baseball	.55
M. Swimming	.29	M. Gymnastics	.57
M. Gymnastics	.29	M. Swimming	.64
W. Softball	.37	W. Track	.71
M. Baseball	.38	W. X-country	.71
M. Wrestling	.57	W. Swimming	.78
Nonathletes	.38	Nonathletes	.47

reverse orders. Newman-Keuls comparisons indicated that men's wrestling was significantly higher than every other team on outcome orientation and, conversely, men's wrestling was lower than every other team on performance orientation.

Clearly, athletic teams differ on competitive orientations. These team differences were not simply a gender difference, as all male teams were not higher than all female teams. Rather the differences seem to reflect the nature of the sports and their competitive structures. Vealey (1988) recently compared individual and team sport athletes on her COI measure. She predicted that individual sport athletes would be more performance oriented because team sports place more emphasis on the outcome. When the predicted results did not materialize, Vealey suggested that team sport athletes are capable of focusing on individual performance as well as team

outcomes. Our results suggest that the emphasis on outcomes rather than the team-individual distinction is the critical feature. Although an individual sport, wrestling clearly emphasizes outcome, as match outcome is the typical measure of success and wrestlers receive little other performance information. Performance during the match makes little difference if the wrestler gets pinned in the final period. In contrast, individual sports such as swimming and track more often measure success with specific performance scores, and personal records are often noted.

The team sports of softball and baseball, which emphasize both team outcomes and individual performance statistics, fell between the scores of wrestlers and other individual sports in our results. This explanation is speculative, though. We only sampled one team in each sport and differences could reflect unique characteristics of particular teams such as team history, national standing, or coach's orientation as well as the consistently reported gender differences. In any event, athletic teams differ on competitive orientations, although the precise reasons for these differences cannot be identified from our results.

Discussion

As expected, athletes were higher on both general and sport-specific achievement orientation, and sport-specific competitiveness is the major discriminator between athletes and nonathletes. This provides construct validity evidence for the SOQ and confirms that sport-specific measures, compared to more general measures, can better identify individuals who are oriented toward sport achievement. Thus it is recommended that sport psychology researchers and practitioners use sport-specific achievement orientation inventories. The multidimensional SOQ and the COI with its relative weighing of performance and outcome orientation offer insights not possible with unidimensional measures. Specifically, athletes were not uniformly high on win orientation, as some might expect, but were more oriented toward performance than outcome.

Vealey (1988), in a recent follow-up to her original work on sport confidence and competitive orientation, confirmed that athletes were more performance oriented than outcome oriented and also that females were more performance oriented than males, as we found in this study. Vealey also compared high school, college, and elite athletes and observed that the difference between performance and outcome orientation increased with level. That is, elite athletes were the most performance oriented and the least outcome oriented. Similarly our intercollegiate athlete sample, which included several Olympic and top national level competitors, was more performance oriented than our nonathlete sample. Vealey reports that performance orientation reflects more control and greater self-confidence, which ultimately enhances performance. As noted earlier, Duda (in press) suggests that ego-involvement (win orientation) may lead to performance decrements and reduced intrinsic interest whereas task-involvement (performance or goal orientation) likely leads to greater achievement and perceived success. Our findings confirm that high level athletes are competitive in that they enjoy competition and strive hard for success, but that their achievement satisfaction depends more on performance than on outcomes.

These collective findings suggest that applied approaches such as goal training, attentional techniques, or imagery exercises that help athletes focus on controllable performance goals should be emphasized. As Vealey (1988) notes, many athletes and coaches at lower levels of competition feel that winning should be emphasized and are reluctant to accept a performance orientation. However, these athletes and coaches probably need performance-oriented applied work more than higher level athletes do. Because sport achievement orientation likely develops from general achievement orientation through participation in sport achievement activities at these lower levels, coaches, instructors, and sport psychologists may have considerable influence on athletes' sport orientation. An increased emphasis on performance orientation may well help promising athletes develop the orientation and techniques that will enhance confidence, satisfaction, and achievement in sport.

Finally, although athletes as a group tend to show these orientations, especially basic competitiveness, there are wide variations among athletic teams, particularly in the relative emphasis on individual performance and win/loss outcomes. In short, intercollegiate athletes are competitive, but winning is *not* the only thing, and it may not be the most important thing.

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