

The Relationship of Competitiveness and Achievement Orientation to Participation in Sport and Nonsport Activities

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Abstract:

The validity of the recently developed Sport Orientation Questionnaire (SOQ), a multidimensional measure of sport achievement orientation, was investigated with both high school and university students. Specifically, we examined the correlations of SOQ scores with other measures of competitiveness and general achievement orientation and we compared the relative abilities of SOQ scores and other achievement measures to discriminate participants and nonparticipants in competitive sports, noncompetitive sports, and nonsport activities. The findings obtained with both high school and university students provided convergent and divergent evidence for the validity of the SOQ. SOQ scores were highly correlated with other competitiveness measures, moderately correlated with general achievement measures, and uncorrelated with competitive anxiety and social desirability. Competitiveness scores were the strongest discriminators between competitive sport participants and nonparticipants, but SOQ scores were weaker discriminators for noncompetitive achievement choices. The findings confirm the value of a multidimensional, sport-specific achievement measure and provide good evidence for the validity of the Sport Orientation Questionnaire.

Article:

Individual differences in sport achievement behavior are obvious, and the investigation of individual differences in achievement orientation should provide insight into sport behavior. Some individuals eagerly approach competitive challenges, others strive for noncompetitive personal goals, and others shy away from all types of sport achievement. Investigations of general personality characteristics have been of little value in explaining such individual differences, and even the work on widely researched, theoretically based achievement motivation constructs has yielded little insight into sport achievement behavior. Within sport psychology the most promising work on individual differences involves the development and use of sport-specific constructs and measures.

The work of Martens and other investigators on competitive anxiety illustrates the value of sport-specific measures. Martens (1977) developed the Sport Competition Anxiety Test (SCAT) and reported excellent reliability and validity for this sport-specific measure of competitive trait anxiety. Further research by Martens and colleagues demonstrated that SCAT was a better predictor of state anxiety in sport competition than were more general anxiety measures, and the SCAT currently is one of our most widely used sport psychology measures. More recently, sport psychologists have developed other useful sport-specific measures including Vealey's (1986) sport confidence inventory and Carron, Widmeyer, and Brawley's (1985) group cohesion questionnaire.

Gill (1986; Gill & Deeter, in press) recently extended this approach by developing a sport-specific measure of achievement orientation known as the Sport Orientation Questionnaire (SOQ). Like Martens' SCAT, the SOQ is a sport-specific measure of personality or individual differences in approaches to competitive sport situations. In contrast to SCAT, the SOQ not only is sport-specific but also approaches achievement orientation as a multidimensional construct. Several researchers question the validity of traditional unidimensional achievement motivation measures for predicting achievement behaviors across varied general achievement situations. Most

notably, Spence and Helmreich (1978; Helmreich & Spence, 1978) advocate a multidimensional construct and developed the Work and Family Orientation Questionnaire (WFO; Helmreich & Spence, 1978) which assesses the four achievement dimensions of mastery (the preference for challenging tasks), work (positive attitudes toward hard work), competitiveness (the desire to win in interpersonal situations), and personal unconcern (the lack of concern with negative reactions of others).

Although the multidimensional WFO measures competitiveness, that competitiveness scale is limited to interpersonal rivalry and does not include more broadly defined competitive and achievement orientations typically discussed in sport psychology. Furthermore, neither WFO nor its competitiveness subscale is designed specifically for sport. Spence and Helmreich (1983) themselves note that nearly all achievement measures and research are restricted to formal academic and vocational settings, and they question the appropriateness of these constructs for other achievement settings such as sport.

In light of the value of sport-specific constructs and the appropriateness of a multidimensional achievement orientation measure, Gill and Deeter (in press) developed the Sport Orientation Questionnaire (SOQ). They reported that a series of exploratory and confirmatory factor analyses revealed a consistent, logical three-factor structure across three separate samples. Alpha reliability coefficients and test-retest correlations indicated that the three subscales of competitiveness (the desire to enter and strive for success in sport competition), win orientation (a focus on interpersonal standards and winning), and goal orientation (a focus on personal standards) were internally consistent and stable over time. Finally, they reported evidence for the validity of the SOQ, as their competitiveness measure consistently differentiated students in competitive classes from those in noncompetitive classes and competitive sport participants from nonparticipants.

The current investigation extends that work and further examines the convergent and divergent validity of the SOQ as a sport-specific achievement orientation measure. Specifically, the relationships of SOQ scores to other measures of competitiveness and general achievement orientation are examined through correlational analyses, and discriminant analyses are used to compare the relative abilities of SOQ scores and other achievement measures to discriminate participants and nonparticipants in competitive sports, noncompetitive sports, and nonsport achievement activities. SOQ scores were expected to correlate highly with other competitiveness measures and moderately with general achievement measures. Also, SOQ scores were expected to discriminate competitive sport participants from nonparticipants better than general achievement measures, but SOQ scores were not expected to be the primary discriminating variables for nonsport achievement activities and choices. Thus, high correlations with similar competitive orientation measures and strong discrimination power for competitive sport participation should provide converging evidence. On the other hand, lower correlations with noncompetitive orientation measures and lower discriminating power for nonsport choices should provide divergent evidence for the validity of the SOQ.

Method

Samples

The primary sample for this investigation included 266 high school students ($n=126$ males; $n=140$ females) with approximately equal numbers of females and males sampled across grades 9, 10, 11, and 12. All students were from the same school system, but 9th-grade students were in a separate, adjacent building. During the scheduled class or homeroom time, the 9th-grade students from randomly selected physical education classes and grades 10, 11, and 12 students from randomly selected homerooms went to an auditorium where the questionnaires were administered by the senior author and two assistants. The second, smaller sample included 86 university students ($n=34$ males; $n=52$ females) enrolled in physical activity skills classes during the university summer session. After receiving permission from course instructors, graduate assistants administered the questionnaires at the beginning of the first class of the session. Participation was voluntary, but all those contacted in both high school and university classes agreed to complete the questionnaires.

Questionnaires

All participants completed the SOQ and WOFO questionnaires. As noted in the introduction, the test developers have reported good evidence for the reliability and validity of both the SOQ (Gill & Deeter, in press) and WOFO (Helmreich & Spence, 1978). The SOQ yields three scores: competitiveness, win orientation, and goal orientation. The WOFO yields four scores: mastery, work, competitiveness, and personal unconcern; but Spence and Helmreich (1983) report that the personal unconcern scale has been of little value in their achievement research and they recommend focusing on the other three scores. All participants also completed the Sport Competition Anxiety Test (SCAT; Martens, 1977), a sport-specific measure of competitive trait anxiety with reported excellent reliability and validity, and the Sports Competition Trait Inventory (SCTI; Fabian & Ross, 1984). Like the SOQ, the SCTI is a sport-specific measure and the authors report good internal consistency. However, validity evidence is weak and the SCTI is a unidimensional measure of competitiveness. Finally, the university sample, but not the high school sample, completed a social desirability scale (Crowne & Marlowe, 1960) to determine whether competitive orientation was independent of social desirability concerns.

Along with the standard questionnaires, participants responded to a series of Yes-No questions that were later used to classify respondents for discriminant analyses. High school students indicated whether or not they (a) participated in competitive sports (such as varsity basketball or tennis club tournaments), (b) participated in noncompetitive sports (such as jogging or noncompetitive swimming), (c) participated in organized nonsport activities (such as a debate team or musical group), (d) intended to attend college, and (e) enjoyed working with computers or wanted to do so in the future. Similarly, university students indicated whether or not they participated in competitive sports, noncompetitive sports, intended to go to graduate or professional school, and enjoyed working with computers. The questions on participation in competitive and noncompetitive sports were the central focus for examining convergent validity. Responses to the questions on nonsport activities, further education, and interest in computers might relate to general achievement but have no logical relationship to competitive sport orientation. Thus, low relationships between SOQ scores and these responses should provide further divergent validity evidence.

Results

Correlations Among Measures

We expected high correlations between SOQ scores and the other competitiveness measures (SCTI and WOFO competitiveness) and moderate correlations between SOQ scores and general achievement measures (WOFO mastery and work). As Table 1 shows, results generally confirmed those expectations, providing convergent validity evidence. All correlations between SOQ scores and the other competitiveness measures were statistically significant, although the correlations between goal orientation and competitiveness scores were in the moderate range. Both the SOQ competitiveness and goal scores correlated moderately with mastery and work, but win orientation demonstrated no relationship to these general achievement measures. Notably, none of the SOQ scores were related to SCAT. The absence of correlation between competitive achievement orientation and competitive anxiety is theoretically logical and in line with most achievement literature, but this is the first empirical evidence for the independence of sport-specific achievement and anxiety measures. Finally, SOQ scores were not related to social desirability, although win orientation exhibited a slight negative correlation with the Crowne-Marlowe social desirability score.

Discriminant Analyses

Competitive Sport Participation. An overall direct-entry discriminant analysis revealed that the nine questionnaire measures (3 SOQ scores, 4 WOFO scores, SCTI, SCAT) significantly, Wilks' $\lambda = .67$, $x^2(9) = 104.55$, $p < .001$, discriminated high school students who participated in competitive sports ($n = 124$) from nonparticipants ($n = 142$). Group means, standardized discriminant coefficients, and univariate results presented in Table 2 indicate that participants were higher than nonparticipants on all achievement scores and that competitiveness

Table 1
Correlations Between SOQ Scores and Other Measures

SOQ score	Competitive measures					
	SCTI		WOFO comp.			
	H.S.	Univ.	H.S.	Univ.		
Competitiveness	.79***	.70***	.65***	.71***		
Win	.53***	.51***	.70***	.70***		
Goal	.48***	.38***	.36***	.32**		
	WOFO achievement measures					
	Mast.		Work		Pers.	
	H.S.	Univ.	H.S.	Univ.	H.S.	Univ.
Competitiveness	.44***	.37***	.27***	.09	-.17**	-.12
Win	.18***	.05	.01	-.12	-.17**	-.18
Goal	.48***	.48***	.53***	.40***	-.10*	.15
	Other measures					
	SCAT		Soc. des.			
	H.S.	Univ.	Univ.			
Competitiveness	-.06	-.15	.03			
Win	-.02	.03	-.28**			
Goal	.17**	-.07	.20			

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

scores were the strongest discriminators. Specifically, the SOQ competitiveness score and SCTI score had the highest univariate F values and discriminant coefficients.

A stepwise discriminant analysis was also performed to more clearly identify the subset of variables that best discriminated competitive sport participants from nonparticipants. The stepwise procedure, which is summarized in Table 3, resulted in the four variables of SCTI, SOQ competitiveness, WOFO mastery, and SCAT significantly, Wilks' $\lambda = .68$, $\chi^2(4) = 101.37$, $p < .001$, discriminating competitive sport participants from nonparticipants. The canonical correlation for this four-variable model (.566) was nearly as high as that for the overall nine-variable model (.576). Also, classification analysis indicated that the stepwise model correctly classified 74.4% of the total sample (72.6% of participants, 76.1% of nonparticipants) whereas the overall model correctly classified 75.6% of the total sample (72.6% of participants, 78.2% of nonparticipants).

Additional stepwise analyses were used to further delineate the relative

Table 2
Means and Univariate Results for High School Participants and Nonparticipants in Competitive Sports

Variable	Participants		Nonparticipants		Univariate		Discriminant coefficient
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>	
SOQ comp.	54.2	8.1	42.2	11.4	95.73	.001	.62
SOQ win	21.2	5.1	17.4	5.4	34.92	.001	-.23
SOQ goal	26.0	3.4	23.6	4.2	25.26	.001	.05
WOFO mast.	19.5	3.9	18.3	4.1	5.29	.05	-.21
WOFO work	20.1	3.0	19.4	3.0	2.87	ns	-.17
WOFO comp.	14.3	2.9	11.8	3.5	39.00	.001	.20
WOFO pers.	7.7	3.1	7.9	2.9	.36	ns	.11
SCTI	88.3	21.5	59.4	24.8	102.10	.001	.58
SCAT	23.0	4.7	22.5	4.8	.89	ns	.18

Table 3
Stepwise Discriminant Analysis for High School Participants and Nonparticipants in Competitive Sports

Step	Variable entered	Wilks' lambda	<i>p</i>	Residual variance	Final discriminant coefficient
1	SCTI	.721	.001	.722	.57
2	SOQ comp.	.695	.001	.695	.59
3	WOFO mast.	.685	.001	.686	-.23
4	SCAT	.679	.001	.680	.16

discriminatory power of the SOQ measure. First, all other variables (SCTI, four WOFO scores, SCAT) were entered directly and then the three SOQ scores were allowed to enter in stepwise fashion to determine if the SOQ measure added significantly to the discrimination over and above all other variables. Results of this analysis indicated that the other six variables significantly ($p < .001$) discriminated participants and nonparticipants, but both the SOQ competitiveness and win scores significantly ($p < .001$) added to the discrimination in stepwise fashion. Finally, another stepwise analysis was performed omitting the SCTI variable to determine the relative discriminatory power of the SOQ measure without the contribution of the highly related and overlapping SCTI score. As the earlier analyses would suggest, the SOQ competitiveness score clearly was the major discriminating variable. The stepwise analysis also entered mastery, SCAT, and personal unconcern, but SOQ competitiveness was the first variable entered and its final discriminant coefficient of 1.09 was much larger than the others, which were all less than .25.

Only 14 of the 86 university students indicated that they participated in competitive sports, making interpretation of group differences tenuous, and the overall discriminant analysis was nonsignificant, Wilks' $\lambda = .82$, (10) = 15.8, $p = .11$. Even though the results are dubious with the skewed sample, they are noted because they parallel the high school findings. Participants were higher on all achievement measures, and univariate analyses revealed significant differences only on the competitiveness measures of SOQ competitiveness ($p < .001$), SCTI ($p < .01$), SOQ win ($p < .05$), and WOFO competitiveness ($p < .05$). Although the overall discriminant analysis for the university sample was nonsignificant, a stepwise analysis indicated that a combination of SOQ competitiveness and SCAT significantly, Wilks' $\lambda = .85$, $x^2(2) = 13.54$, $p < .002$, discriminated competitive sport participants and nonparticipants. SOQ competitiveness was entered first and had a much larger discriminant coefficient. As with the high school sample, participants were higher ($M=53.4$) on

SOQ competitiveness than nonparticipants ($M=41.5$), but nonparticipants ($M=22.2$) were higher than participants ($M=19.7$) on SCAT. Overall, all these analyses suggest that competitiveness is the primary variable discriminating competitive sport participants and nonparticipants.

Noncompetitive Sport Participation. Analysis of the high school data revealed that participants in noncompetitive sports ($n=197$) differed significantly, Wilks' $\lambda = .85$, $x^2(9) = 42.32$, $p < .001$, from nonparticipants ($n=69$). As the means and univariate results in Table 4 indicate, participants were significantly higher on all achievement scores except SOQ win and did not differ from nonparticipants on WOFO personal concern or SCAT. In contrast to the analysis for competitive sport participants, competitiveness scores were not necessarily the strongest discriminators. The pattern of discriminant coefficients indicated

Table 4
Means and Univariate Results for High School Participants and Nonparticipants in Noncompetitive Sports

Variable	Participants		Nonparticipants		Univariate		Discriminant coefficient
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>	
SOQ comp.	49.8	10.7	42.1	12.3	24.61	.001	.25
SOQ win	19.6	5.4	18.1	5.9	3.53	ns	-.61
SOQ goal	25.4	3.7	22.8	4.3	22.04	.001	.36
WOFO mast.	19.3	4.0	17.6	3.7	9.57	.01	.02
WOFO work	20.1	3.0	18.9	3.1	8.67	.01	-.07
WOFO comp.	13.4	3.4	11.7	3.5	12.87	.001	.39
WOFO pers.	7.8	3.1	7.9	2.6	.09	ns	.11
SCTI	78.2	25.6	57.6	26.9	32.42	.001	.65
SCAT	22.9	4.8	22.2	4.5	1.08	ns	.14

that the SCTI score was a strong discriminator, as was goal orientation (which was not a strong discriminator for competitive sport participation). The SOQ competitiveness score was a weaker discriminator, and win orientation actually had a *negative* coefficient.

In the stepwise discriminant analysis, the SCTI score was entered first, followed by SOQ goal, SOQ win, and WOFO competitiveness. As with the overall analysis, SOQ win had a negative discriminant coefficient whereas the other three variables had moderate positive coefficients. Classification analysis revealed that 79.3% of the total sample were classified correctly with the four-variable stepwise model (95.9% of participants, 31.9% of nonparticipants), and only slightly more (81.2%) were classified correctly with the overall model.

Additional discriminant analyses were calculated to investigate the relative contribution of SOQ scores after all other variables were considered. After the other six variables were included, both SOQ win and SOQ goal—but not SOQ competitiveness—entered and contributed to the discrimination between noncompetitive sport participants and nonparticipants. When the analysis was done without the SCTI score, all three SOQ scores significantly added to the discrimination beyond the other five variables, with SOQ competitiveness entering first. Without the SCTI score, SOQ competitiveness was the strongest discriminator and SOQ win again had a negative coefficient.

For the university sample, the distribution of noncompetitive sport participants ($n=67$) and nonparticipants ($n=19$) was unequal, and the overall discriminant analysis was nonsignificant, but, similar to the high school sample, noncompetitive sport participants had slightly higher SCTI, goal, and mastery scores and *lower* win scores. A stepwise analysis indicated that a combination of the SCTI score and SOQ win significantly, Wilks' $\lambda = .79$, $x^2(2) = 19.99$, $p < .001$, discriminated noncompetitive sport participants and nonparticipants. Discriminant coefficients for the two variables were approximately equal, but in opposite directions. Participants had higher SCTI scores ($M=69.2$) than nonparticipants ($M=54.6$), but nonparticipants ($M=21.2$) had higher SOQ win scores than participants ($M=18.2$).

Overall, SOQ scores were important discriminators for noncompetitive sport participation, as they were for competitive sport participation. However, all three SOQ scores, and not just competitiveness, were significant contributors. Noncompetitive sport participants scored higher than nonparticipants on both competitiveness and goal orientation, but apparently win orientation detracts from noncompetitive sport participation.

Nonsport Activity Participation. Again, the overall discriminant analysis for the high school sample revealed a significant difference, Wilks' $\lambda = .89$, $x^2(9) = 31.42$, $p < .001$, between nonsport activity participants ($n=96$) and nonparticipants ($n=170$), but this time competitiveness scores were weaker discriminators. In fact, as Table 5 shows, participants were significantly ($p < .05$) lower on SOQ win, and slightly but nonsignificantly lower than nonparticipants on WOFO competitiveness and SCTI scores. Participants were significantly ($p < .05$) higher than nonparticipants on SCAT, WOFO work, and SOQ goal. The stepwise analysis entered seven of the variables (all but SOQ competitiveness and mastery), and thus the final stepdown results were quite similar to the overall results in Table 5. Both the SOQ win and SCTI scores had negative coefficients, as nonparticipants scored higher than participants, and positive coeffi-

Table 5
Means and Univariate Results for High School Participants and Nonparticipants in Nonsport Activities

Variable	Participants		Nonparticipants		Univariate		Discriminant coefficient
	M	SD	M	SD	F	p	
SOQ comp.	46.7	11.0	48.4	12.0	1.24	ns	-.15
SOQ win	18.2	4.9	19.7	5.9	4.34	.05	-.53
SOQ goal	25.5	3.1	24.3	4.4	6.47	ns	.56
WOFO mast.	19.3	4.0	18.6	4.1	1.78	ns	.07
WOFO work	20.4	2.9	19.4	3.1	7.77	.01	.29
WOFO comp.	12.9	3.2	13.0	3.6	.02	ns	.49
WOFO pers.	8.1	2.9	7.7	3.0	1.04	ns	.32
SCTI	69.8	27.4	74.6	27.3	1.86	ns	-.47
SCAT	23.9	4.2	22.1	4.9	8.83	.01	.44

cients indicated that participants scored higher on SCAT, WOFO work, and SOQ goal. Additional discriminant analyses revealed that both SOQ goal and win, but not competitiveness, added to the discrimination after all other variables were entered. When the SCTI score was omitted, all three SOQ scores added to the discrimination with similar negative coefficients for SOQ competitiveness and win and a positive coefficient for SOQ goal.

Generally, SOQ scores were not such strong discriminators for nonsport activity participation as they were for sport participation. The sport-specific SOQ competitiveness score was not a significant discriminator, and win orientation seemed to detract from nonsport activity participation. Goal orientation was a positive discriminator, perhaps because it overlaps with nonsport achievement orientation.

Further Education and Interest in Computers. Most high school students ($n=223$) indicated that they intended to go to college and this group differed significantly, Wilks' $\lambda = .80$, $x^2(9) = 57.98$, $p < .001$, from the "No" responders ($n=42$). Discriminant coefficients and univariate analyses indicated that the strongest discriminators ($p < .001$) were WOFO work, SOQ goal, SCTI, and SCAT. "Yes" responders scored higher on all those measures as well as on SOQ competitiveness, WOFO mastery, and WOFO competitiveness, but the two groups were nearly identical on SOQ win, which had a negative discriminant coefficient. Similarly, the stepwise analysis entered WOFO work, SCAT, SCTI, SOQ win, and WOFO competitiveness, in that order, with SOQ

win having a negative coefficient. Although univariate analyses had indicated that students who intended to go to college scored higher on SOQ competitiveness and SOQ goal, neither score entered the stepwise analysis, perhaps because they overlap with the more general achievement measures in this discrimination.

High school students indicating an interest in computers ($n=189$) differed, Wilks' $\lambda = .92$, $\chi^2(9) = 20.77$, $p < .05$, from the "No" responders ($n=77$), but the difference was not as strong as on the other achievement activity choices. Again, "Yes" responders were higher on most achievement scores, and significantly so on WOFO work ($p < .001$), WOFO mastery ($p < .01$), SOQ goal ($p < .01$), SCTI ($p < .01$), and SOQ competitiveness ($p < .05$). With the stepwise analysis, the WOFO work score entered first, followed by the SCTI and WOFO mastery scores, yielding a significant, Wilks' $\lambda = .93$, $\chi^2(3) = 20.34$, $p < .001$, difference between Yes and No responders. Discriminant analyses with the university sample did not reveal any significant differences for either intent to go to graduate school or interest in computers responses. As expected, SOQ scores were not strong predictors of the intent to further their education or of an interest in computers.

Discussion

Overall, the findings provide good evidence for the validity of the SOQ and suggest that a sport-specific measure predicts sport achievement choices better than do more general achievement measures. As predicted, SOQ scores were highly correlated with the SCTI and WOFO competitiveness scores and moderately correlated with the WOFO general achievement scores of mastery and work. This pattern was most evident for the SOQ competitiveness score, which is the dominant score on the SOQ measure and one that represents a basic achievement orientation for striving for success in competitive sport. Win orientation was strongly related to the other competitiveness scores, but not to general achievement measures, suggesting that this score is indeed sport-specific and not related to achievement orientation outside of competitive sport settings. Goal orientation, by contrast, was more highly related to general achievement scores. Possibly SOQ goal orientation reflects a general individual achievement orientation directed toward competitive sport.

The lack of correlation between SOQ scores and SCAT is notable for future work with these measures and indicates that competitiveness and competitive anxiety are not bipolar opposites, but independent constructs that should be assessed separately. Consideration and measurement of competitiveness and competitive anxiety as independent constructs permits investigators to consider the separate and interactive influences of these variables on achievement behaviors and reactions in varied competitive and noncompetitive sport settings.

Furthermore, the multidimensional approach to sport achievement orientation, and the separate assessment of win and goal orientation, permits investigations and insights not possible with a unidimensional sport achievement or competitiveness measure, such as the SCTI. The series of discriminant analyses in this study demonstrates the advantage of a multidimensional measure, as the SOQ scores exhibited differing discriminatory power across the comparisons. Our results indicate that the unidimensional SCTI was a good discriminator for competitive sport participation. Indeed, we have provided stronger validity evidence for the SCTI than the test developers did. However, when we consider the discriminant analyses across noncompetitive sport and nonsport activity participation, the multidimensional SOQ permits insights not possible with the SCTI. For example, win orientation, which is an important discriminator for competitive sport participation, is not an important discriminator for noncompetitive sport participation, and goal orientation is more characteristic of noncompetitive sport participants. The SCTI and similar unidimensional measures do not separate win and goal orientation from competitiveness, and thus do not reveal such differences in achievement orientation patterns.

The discriminant analyses also provided convergent and divergent validity evidence for the SOQ. The sport-specific competitiveness scores clearly were the strongest discriminators between competitive sport participants and nonparticipants, confirming the value of situation-specific individual difference measures and providing convergent validity evidence for the SOQ. All three SOQ scores contributed to this discrimination, and the difference between competitive sport participants and nonparticipants was the strongest difference in the study.

On the other hand, sport competitiveness scores were weaker than, or at best no better than, general achievement measures at predicting other achievement choices, providing divergent validity evidence.

The current findings also confirm the value of a multidimensional measure as the separate dimensions of competitiveness, win, and goal orientation demonstrated differing relationships to sport and general achievement choices. Competitiveness was the strongest discriminator for competitive sport participation and also was a major discriminator for most other achievement choices. Win orientation, by contrast, was a strong discriminator *only* for competitive sport participation. For most other achievement choices, including noncompetitive sport participation, win orientation was a much weaker discriminator than either general achievement measures or other sport-specific measures, and in some cases actually was a negative discriminator. Goal orientation, which reflects a focus on personal standards, seems more closely related to general achievement measures both conceptually and in the results reported here.

In sum, the findings confirm the value of a multidimensional, sport-specific achievement measure and specifically provide convergent and divergent evidence for the validity of the Sport Orientation Questionnaire.

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