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Precompetition Self-Confidence: The Role of the Self

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Higgins' (1987) self-discrepancy theory holds that certain emotions occur as a result of discrepancies between pairs of psychological entities called self-guides. The present study explored self-discrepancies in self-confidence in relation to performance and cognitive anxiety. Slalom canoeists (n = 81) reported ideal, ought, and feared levels of self-confidence 3 hours before a national ranking slalom tournament. Within a half-hour of the start of the race, canoeists reported their actual self-confidence and cognitive anxiety levels. Hierarchical multiple-regression analyses revealed that self-discrepancies predicted significantly more performance variance than actual self-confidence alone. Additionally, hierarchical multiple-regression analyses revealed that, contrary to the specific predictions of self-discrepancy theory, ideal and feared discrepancies (not "ought" and "feared" discrepancies) significantly predicted cognitive anxiety. Additional findings, implications, and directions for further research into the nature of the self in sport are discussed.

Key Words: self-discrepancy theory, cognitive anxiety, sport performance

The importance of self-confidence for success in sports has been well documented in various sport settings (Feltz, 1994; Mahoney & Avener, 1977; Vealey, 1999; Woodman & Hardy, 2003). However, self-confidence has been operationalized in several ways in the sport psychology literature, with most researchers typically using theoretical frameworks proposed by Bandura (1977, 1986) or Vealey (1986; Vealey, Hayashi, Garner-Holman, & Giacobbi, 1998).

Bandura's (1977, 1986) theory defines self-efficacy as a person's judgment of his/her capability to organize and execute courses of action required to attain a certain type of performance. It is concerned not with the skills one has but with the judgments about what one can do with whatever skills one has. Bandura postulated four key determinants upon which athletes base their self-efficacy beliefs: performance accomplishments, vicarious experience, verbal persuasion, and emotional arousal. Vealey's (1986) model of sport confidence is similar to self-efficacy theory in that it is concerned with the belief or degree of certainty that individuals have about their ability to succeed in sport. The model predicts that trait (dispositional) sport confidence and goal orientations (e.g., performance and outcome goals) interact to determine state sport-confidence, which in turn directly influences performance.

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Several limitations and a lack of empirical research into the sport confidence model led Vealey et al. (1998) to extend her model to include sources of self-confidence in sport, which in essence extends Bandura's (1977, 1986) four sources of self-efficacy to nine.

Woodman and Hardy's (2003) meta-analysis of the relationship between self-confidence and sport performance revealed effect sizes that ranged from $r = -0.27$ to $r = 0.64$. Furthermore, a recent meta-analysis of the self-efficacy/sport performance relationship (Moritz, Feltz, Fahrback, & Mack, 2000) revealed that depending on how self-efficacy and performance were assessed, the proportion of performance variance accounted for ranged from 1% to 12.6%.

One possible reason for these equivocal findings may be in the way that self-confidence and self-efficacy have been conceptualized and measured. For example, consider two male athletes who report the same level of self-confidence for the same task: Athlete A scores 5 out of a possible 10 but feels that this level should be higher for the task. Athlete B also scores 5 but feels that this level is adequate for the task. Although both athletes report the same score for self-confidence, Athlete A has a discrepancy between his perceived level of self-confidence and the level he feels is needed in order to be successful. Athlete A may be feeling more discomfort about performing the task than Athlete B, due to having a lower level of self-confidence relative to his ideal levels. Consequently, the relationship between self-confidence and performance is likely to be somewhat different depending on the performer's perception of the level of self-confidence he/she needs in order to perform the task successfully.

One theory that could explain this phenomenon is Higgins' (1987, 1996) self-discrepancy theory, which holds that certain emotions occur as the result of discrepancies between pairs of psychological entities called self-guides. According to Higgins (1987), there are three basic entities of the self: (a) the actual self, one's representation of the attributes he or she believes he/she actually possesses; (b) the ideal self, one's representation of the attributes he/she would ideally like to possess; and (c) the ought self, one's representation of the attributes he or she believes he/she should possess. According to the theory, living up to an ideal means attaining something desired, whereas living up to an "ought" usually means doing something to avoid disapproval from the self or others. Self-discrepancy theory proposes that people are motivated to reach a condition wherein their self-concept (actual self) matches their self-guide (ideal self and ought self).

Carver and Scheier (1998) have suggested that ideal selves are determined by approach goals which exert their influence on behavior via discrepancy-reducing feedback loops. In other words, the more one moves toward the goal, the more one reduces the discrepancy between the actual self and the ideal self. In contrast, according to Carver and Scheier, ought selves not only involve moving toward a positive goal (as Higgins' original theory states), but also trying to simultaneously move away from an anti-goal or a feared self—a set of qualities a person wants *not* to become but is concerned about possibly becoming (Oyserman & Markus, 1990). This produces a discrepancy-enlarging feedback loop, that is, the more one moves away from the anti-goal, the bigger the discrepancy.

In his more recent work, Higgins (1997) proposed a similar distinction whereby ideal goals (hopes and aspirations) have a promotion focus, and ought goals (duties and responsibilities) have a prevention focus. Specifically, individuals with a promotion focus are concerned with advancement and accomplishments by

attaining their hopes and aspirations, their ideals. Conversely, individuals with a prevention focus are concerned with protection and safety (i.e., preventing negative outcomes) by fulfilling their responsibilities and requirements, their "oughts."

Lawrence, Carver, and Scheier (2002, p. 789) state, "People compare their present behavior to their intentions, goals, or standards." When there is a discrepancy between a perceived state and a desired state, it is hypothesized that individuals will alter their behavior to minimize this discrepancy (Carver & Scheier, 1998, 1999; Lawrence et al., 2002). Specifically, if one's progress toward a desired state is too slow, this leads to negative affect. However, this negative affect is accompanied by increased effort directed toward attaining the goal. Conversely, if one's rate of progress toward a desired state is faster than needed, this leads to positive affect. However, this positive affect is accompanied by "coasting" or a withdrawal of effort, a phenomenon that Carver and Scheier (1999) call the Cruise Control Model. Research supporting this notion has shown that people in positive moods expend less effort on processing tasks than people in negative moods (e.g., Melton, 1995).

According to self-discrepancy theory (Higgins, 1987), when there is an actual/ideal discrepancy and a person's actual self does not match the *ideal self*, the discrepancy is seen as a failure to achieve a positive outcome (e.g., not obtaining what one desires for the self). Such discrepancies are predicted to result in dejection-related affect such as sadness, disappointment, or dissatisfaction. When there is an actual/ought discrepancy and a person's actual self does not match the *ought self*, the discrepancy is seen as the presence of a negative outcome (e.g., not obtaining a duty or obligation). Such discrepancies are predicted to result in agitation-related affect such as guilt, worry, and tension.

In a recent test of the role of the feared self within a self-discrepancy theory framework, Carver, Lawrence, and Scheier (1999) found that anxiety and guilt were strongly related to the feared self when individuals were close to the feared self. In such instances, discrepancies from the ought self played no role. However, anxiety and guilt were strongly related to actual/ought discrepancies when individuals were further from the feared self. This finding suggests that feared selves should moderate the relationship between actual/ought discrepancies. In other words, being close to the feared self will predict higher anxiety, but when the feared self is more remote, large discrepancies from the ought self should predict higher anxiety.

To return to the inconsistent findings reported in the research on self-confidence-performance, it may be that our understanding of this relationship could be enhanced by consideration of the ideal, ought, and feared selves. The present study examined this proposal by testing four hypotheses. The first two examined the relationship between self-confidence and performance. First we examined the discrepancies of actual/ideal, actual/ought, and actual/feared levels of self-confidence and their relationship with sport performance. According to Bandura's (1986) self-efficacy theory, athletes with high self-efficacy are more likely to try harder and choose challenging tasks. Consequently, individuals who are close to an ought or ideal self, and thus perceive themselves to have relatively high self-confidence, should outperform those who are far from an ought or ideal self, and thus perceive themselves to have relatively low levels of self-confidence. However, according to Carver and Scheier (1999), when there is a discrepancy between actual and ought or ideal levels of self-confidence, one will invest extra effort in the task to reduce that discrepancy, and should therefore outperform individuals who have little or no discrepancy. Second, we hypothesized an interaction between actual/feared dis-

crepancies and actual/ideal or actual/ought discrepancies on performance. In other words, when performers are near their feared self, discrepancies from the ideal or ought self should be unrelated to performance. However, when performers are far from their feared self, discrepancies from the ideal or ought self should be the main predictor of performance.

The final two hypotheses examined the relationship between confidence discrepancies and affect. The third hypothesis tested the self-discrepancy theory prediction that actual/ought self-confidence discrepancies would correlate strongly with cognitive anxiety, especially when ideal discrepancies are controlled. Finally, in relation to previous research (Carver et al., 1999), the final hypothesis predicted that there should be an interaction only between actual/feared and actual/ought self-confidence discrepancies on cognitive anxiety, not between actual/feared and actual/ideal confidence discrepancies. More precisely, when performers are near their feared self, discrepancies from the ought self should be unrelated to anxiety. However, when performers are far from the feared self, ought discrepancies should be the main predictor of anxiety, with larger discrepancies predicting higher anxiety.

Method

Participants and Measures

Ninety-eight British slalom canoeists participated in this study. They comprised 23 premier division (15 M, 8 F), 53 first division (41 M, 12 F), and 22 second division (18 M, 4 F) slalom canoeists. Their mean age was 22.5 years ($SD = 9.5$) and the mean competitive racing experience was 7.5 years ($SD = 6.3$). All participants gave informed consent prior to data collection.

The Competitive State Anxiety Inventory. The CSAI-2 (Martens, Burton, Vealey, Bump, & Smith, 1990) was used to measure actual levels of self-confidence and cognitive anxiety. The inventory contains 27 items, 9 for each of the three subscales: self-confidence, cognitive anxiety, and somatic anxiety. The 27 items are measured using a Likert scale ranging from 1 = not at all to 4 = very much so. Thus the possible scores for each subscale range from 9 to 36. Examples of items include "I feel self-confident" (self-confidence), "I am concerned about this competition" (cognitive anxiety), and "My body feels tense" (somatic anxiety). The internal consistency for the three subscales has been demonstrated in several studies with alpha coefficients ranging from 0.79 to 0.90 (Martens et al., 1990). For this study, only the data from the self-confidence and cognitive anxiety subscales were retained for analysis.

The Self-Discrepancy CSAI-2. A modified version of the CSAI-2 was used to measure ideal, ought, and feared levels of self-confidence and cognitive anxiety. The modified inventory was presented over two pages. The first page contained written instructions of how to fill out the modified inventory, followed by a description of the different selves which was adapted from the selves inventory used by Carver et al. (1999). It was also emphasized that although the same questions were being asked three times, they were asked in three different ways and the participants were encouraged to take their time when answering them.

The description of the three selves described on Page 1 was as follows:

The Ideal Self: "Your ideal self is the kind of person you'd really *like* to be.

It is defined by the characteristics you would ideally like to have. It's not necessary that you have these characteristics now, only that you believe you want to have them."

The Ought Self: "Your ought self is the kind of person you believe you have the *duty* or *obligation* to be. It is defined by the characteristics you think you ought to possess, or feel obligated to possess. It's not necessary that you actually have these characteristics now, only that you believe you ought to have them."

The Feared Self: "Your feared self is the kind of person you *fear* or *worry* about becoming. It's defined by the characteristics you think you might have in the future but that you'd rather *not* become. It's not necessary that you have these characteristics now, only that you want to avoid having them."

The Self-discrepancy CSAI-2 was presented on the second page. The inventory had the original 27 CSAI-2 questions down the left side of the page. Three titles were presented to the right of the questions: Ideal self; Ought self; Feared self. Below these titles were three subheadings: Ideally I'd like to be; I feel I ought to be; I do not want to be. The original Likert scale of 1 = not at all to 4 = very much so was presented for each subheading for each of the 27 items. Participants then rated where they ideally would like to be (ideal self), where they think they ought to be (ought self), and where they did not want to be (feared self) for all 27 items. The three scales were presented in random order across participants to prevent any priming effects.

Procedure and Performance

Data were collected over one competitive season covering eight race events. In canoe slalom, competitors are timed over two runs in one day, usually one in the morning and one in the afternoon. Participants completed the Self-discrepancy CSAI-2 approximately 3 hours before the run of their choice. Within half an hour before the competitive run, participants completed the original Martens et al. (1990) CSAI-2 (the actual self).

Canoe slalom performance consists of two timed runs down a course that has upstream and downstream gates which are numbered in sequence. If competitors touch a gate with their paddle, buoyancy aid, helmet, or boat, they incur a 2-second time penalty; if they miss a gate, they are given a 50-s penalty; if they are judged to have deliberately moved a gate, they are also given a 50-s penalty. In the premier division the outcome of each competitor's place is decided by the combined times of both runs. In Divisions 1, 2, 3, and 4, the outcome of the race is determined by the faster of the two runs. The performance measure (time) was taken from the race in which the performer completed the CSAI-2, the first or second run.

Due to the nature of the penalty system, it was decided to remove all participants who incurred a 50-s penalty on statistical grounds. This was because some races were won within a 90-s time limit, and race times that included a 50-s time penalty would vastly inflate performance times, thereby confounding any correlation-based analyses conducted on the data. Furthermore, due to the difficulty level and the nature and flow of the water changing with each race, and as the main performance focus in canoe slalom is (based on) speed, all technical errors (2-s

penalties) were removed from the analysis, as they could also confound the results but were too few to analyze. This left 81 slalom canoeists for the final analysis. These comprised 21 premier division (14 M, 7 F), 44 first division (35 M, 9 F), and 16 second division (13 M, 3 F) slalom canoeists. The mean age of the performers analyzed was 22 ± 9.1 years and the mean competitive racing experience was 7.8 ± 6.5 years.

Results

Reliability Analysis

Reliability analyses were run for actual and all modified CSAI-2 subscales. The internal consistency alphas for actual, ideal, ought, and feared self-confidence subscales were .91, .69, .84, and .87, respectively. Actual, ideal, ought, and feared cognitive anxiety subscales were .85, .74, .70, and .76, respectively. Actual, ideal, ought, and feared somatic anxiety subscales were .90, .73, .76, and .88, respectively. These internal consistencies were considered adequate.

Self-Confidence Discrepancy Scores

The means for actual, ideal, ought, and feared self-confidence scores were 23.43 ± 5.57; 32.28 ± 3.58; 29.82 ± 4.43; and 14.64 ± 6.41, respectively. The means for actual, ideal, ought, and feared cognitive anxiety scores were 20.19 ± 5.68; 15.31 ± 4.01; 17.97 ± 4.51; and 28.92 ± 5.72, respectively. Self-confidence discrepancies were calculated by subtracting actual from ideal, actual from ought, and feared from actual confidence levels. The mean self-confidence of the sample was 8.85 ± 6.03 below their ideal self-confidence level, 6.39 ± 6.09 below their ought self-confidence level, and 8.79 ± 8.57 above their feared level of self-confidence. Independent *t*-tests were used to test for gender differences in ideal, ought, and feared discrepancies, as well as for differences in actual self-confidence and cognitive anxiety. Only one significant difference was revealed, with women reporting a significantly higher ought discrepancy than men, $t(79) = -2.46$, $p < .05$.

In order to control for different course lengths and the different performance standards of the three divisions used, each individual's performance data was standardized within race and all data were then collapsed across races. Race time was used as the performance measure, with lower race times showing better performance. Furthermore, in order to control for gender differences, we standardized all independent variables (actual confidence, cognitive anxiety, ideal, ought, and feared discrepancies) within each sex before collapsing across the sexes. Finally, due to high correlations between the independent variables (see Table 1), the combined use of variance decompositions and the condition index (Belsley, Kuh, & Welsch, 1980) was employed to check for multicollinearity. Belsley et al. (1980) recommend that any independent variable that has a condition index of above 30 and contributes more than 50% of the variance to two or more regression coefficients should be excluded from that regression model. Since the highest condition index was 4.8 in the present data, all independent variables were included in the analyses.

Hierarchical Multiple Regression Analysis

Hierarchical multiple regression analysis was used to test the first hypothesis that self-confidence discrepancies would significantly predict performance (race

Table 1 Intercorrelations Between Self-Confidence Discrepancies and Cognitive Anxiety

	Performance	Ideal discrep.	Ought discrep.	Feared discrep.	Actual confidence
Performance					
Ideal discrepancy	.131				
Ought discrepancy	–.056	.735***			
Feared discrepancy	.140	–.371**	–.343**		
Actual confidence	.045	–.812***	–.708***	.646***	
Actual cognitive anxiety	–.211*	.548***	.481***	–.404***	–.517***
Partial correlations	Actual cogn. anx.				
Ideal discrepancy controlling for ought	.33**				
Ought discrepancy controlling for ideal	.14				

*$p < .06$; **$p < .01$; ***$p < .001$

time) over and above actual self-confidence. Actual self-confidence was entered first into the regression equation, while ideal, ought, and feared discrepancies were entered second as a block. Self-confidence did not significantly predict performance, $R^2 = .002$, $F(1, 79) = .161$, $p = .689$. However, the three discrepancies accounted for a significant proportion of performance variance over and above actual self-confidence, $R^2_{cha} = .111$, $F(3, 76) = 3.18$, $p = .029$. Ideal discrepancies had a significant positive relationship with performance time, $\beta = .569$, $p < .01$, showing that the closer the participants were to their ideal level of self-confidence, the better they performed. Neither ought discrepancies ($\beta = –.252$, $p = .136$) nor feared discrepancies ($\beta = .091$, $p = .550$) had significant beta coefficients (see Table 2).

Performance Moderated Hierarchical Regression Analysis

To test the second hypothesis that there would be a significant interaction between ideal and feared discrepancies (and ought and feared discrepancies) upon performance, we conducted a moderated hierarchical regression analysis with variables entered in the following order: (a) actual self-confidence; (b) feared and ideal discrepancies; (c) Feared × Ideal discrepancies interaction. As in the previous analysis, actual self-confidence was not a significant predictor of performance, $R^2 = .002$, $F(1, 79) = .161$, $p = .689$. However, ideal and feared discrepancies significantly predicted performance over and above self-confidence, $R^2_{cha} = .085$, $F(2, 77) = 3.58$, $p < .05$. Finally, the product term (Feared × Ideal discrepancy) significantly predicted performance over and above the main effects, $R^2_{cha} = .09$, $F(1, 79) = 8.26$, $p < .01$ (see Table 3). When performers were near their feared self, discrepancies from the ideal self were relatively unrelated to performance. However, when performers were far from their feared self, the ideal self had a much larger effect on performance. Figure 1 depicts the nature of the interaction between ideal and feared discrepancies upon performance.

Table 2 Hierarchical Regression Analysis Results

Variables entered	R^2	R^2_{cha}	F_{cha}	*df*	β	*SE*	*t*
Model 1							
Actual confidence	.002	.002	.161	1, 79			
Model 2							
Constant					–.133	.087	–1.53
Actual confidence	.113	.111*	3.18	3, 76	.222	.204	1.08
All discrepancies							
Ideal discrepancies					.569	.171	2.71**
Ought discrepancies					–.252	.136	–.150
Feared discrepancies					.091	.124	.600

*$p < .0$; **$p < .01$

Table 3 Moderated Hierarchical Regression Analysis Results: Self-Confidence, Ideal and Feared Discrepancies Upon Performance

Variables entered	R^2	R^2_{cha}	F_{cha}	*df*	β	*SE*	*t*
Model 1							
Actual self-confidence	.002	.002	.161	1, 79			
Model 2							
Actual self-confidence							
Feared and ideal discrepancies	.087	.085**	3.58	2, 77			
Model 3							
Constant					–0.43	.09	.481
Actual self-confidence					.356	.189	.87*
Feared discrepancy					.170	.125	1.36
Ideal discrepancy					.498	.161	3.09***
Feared × Ideal	.176	.09***	8.26	1, 76	.249	.087	2.87***

*$p = .07$; **$p < .05$; ***$p < .01$

The moderated hierarchical regression analysis testing the relationship between actual self-confidence and ought and feared discrepancies upon performance revealed no significant findings: actual self-confidence, $R^2 = .002$, $F(1, 79) = .161$, $p = .689$; ought and feared discrepancies, $R^2_{cha} = .026$, $F(2, 77) = 1.01$, $p = .367$; and the product term (Feared × Ideal discrepancy), $R^2_{cha} = .03$, $F(1, 79) = 2.45$, $p = .122$.

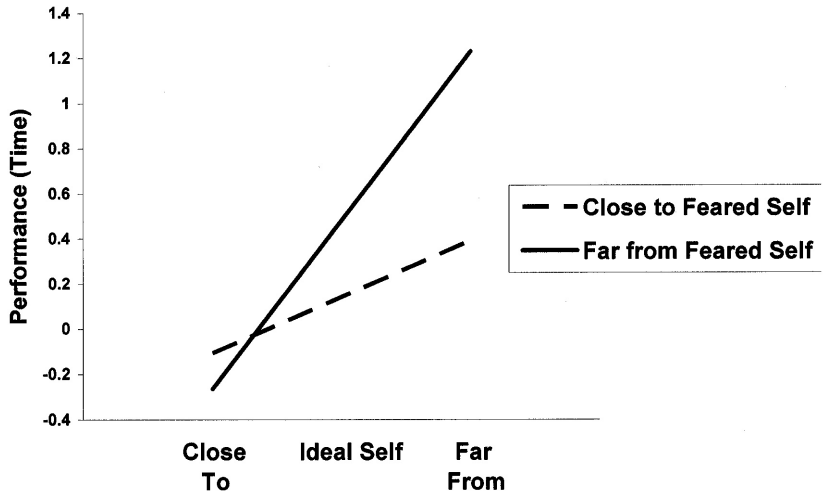

Figure 1 — Regression slopes (± 1 *SD*) showing the interaction between feared and ideal self-discrepancies upon performance (time).

Cognitive Anxiety Correlations

To test the third hypothesis that ought discrepancies are uniquely associated with agitation-related affect (i.e., cognitive anxiety), we calculated bivariate and partial correlations between all three discrepancies. Results showed that all three discrepancies were moderately related to cognitive anxiety: ideal discrepancy, $r = .548$, $p < .001$; ought discrepancy, $r = .481$, $p < .001$; and feared discrepancy, $r = -.404$, $p < .001$. According to self-discrepancy theory, actual/ought discrepancies should correlate strongly to anxiety when actual/ideal discrepancies are controlled. Furthermore, there should only be a minimum relationship between anxiety and actual/ideal discrepancies when ought discrepancies are controlled. However, actual/ought discrepancies were no longer significantly related to cognitive anxiety when ideal discrepancies were controlled (partial $r = .14$, $p = .22$). Furthermore, ideal discrepancies were still moderately related to cognitive anxiety (partial $r = .33$, $p < .01$) when ought discrepancies were controlled (see Table 1).

Cognitive Anxiety Moderated Hierarchical Regression Analysis

To test the final hypothesis that there would be a significant interaction between feared and ought discrepancies upon cognitive anxiety, but not between feared and ideal discrepancies, we conducted two further moderated hierarchical regression analyses. The first analysis tested the hypothesized relationship between feared and ought discrepancies upon cognitive anxiety. Feared and ought discrepancies accounted for a significant proportion of the variance in cognitive anxiety, $R^2 = .296$, $F(2, 78) = 16.43$, $p < .001$. However, the product term (Feared × Ought discrepancy) failed to account for any further significant proportion of the variance, $R^2_{cha} = .013$, $F(1, 77) = 1.48$, $p = .23$.

Table 4 Moderated Hierarchical Regression Analysis Results: Cognitive Anxiety, Ideal and Feared Discrepancies

Variables entered	R^2	R^2_{cha}	F_{cha}	*df*	β	*SE*	*t*
Model 1							
Feared and ideal discrepancies	.347	.347**	20.73	2, 78			
Model 2							
Constant					–.067	.095	–.714
Feared discrepancy					–.335	.133	–2.52*
Ideal discrepancy					.395	.171	2.32*
Feared × Ideal	.381	.034*	4.26	1, 76	–1.88	.092	–2.04*

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

The second moderated hierarchical regression analysis examined the interaction between feared and ideal discrepancies upon cognitive anxiety. Feared and ideal discrepancies accounted for a significant proportion of the variance in cognitive anxiety, $R^2 = .347$, $F(2, 78) = 20.73$, $p < .001$. The product term (Feared × Ideal discrepancy) also accounted for a significant proportion of variance over and above the main effects, $R^2_{cha} = .034$, $F(1, 76) = 4.26$, $p < .05$ (see Table 4). Figure 2 depicts the nature of the interaction between feared and ideal discrepancies upon cognitive anxiety. When performers were far from the feared self, discrepancies from the ideal self were relatively unrelated to anxiety. However, when they were close to the feared self, discrepancies from the ideal self had a much stronger effect on cognitive anxiety. In other words, cognitive anxiety increased as the discrepancy from the ideal self increased, and this increase was greater when performers were close to the feared self.

Discussion

Our results support the hypothesis that self-discrepancies in self-confidence are a stronger predictor of performance than self-confidence measures alone. Consistent with the first hypothesis, self-discrepancies predicted performance over and above actual levels of self-confidence. The results also partially supported the second hypothesis that there would be an interaction between positive self-guides (ideal or ought discrepancies) and feared discrepancies upon performance. However, only the interaction between ideal and feared discrepancies was significant. All three discrepancies significantly correlated with cognitive anxiety. However, contrary to self-discrepancy theory predictions, ought discrepancies did not significantly correlate with cognitive anxiety when ideal discrepancies were controlled. Furthermore, ideal discrepancies were moderately correlated with anxiety when ought discrepancies were controlled. Finally, although ought and feared self-confidence discrepancies did not interactively predict cognitive anxiety, ideal and feared self-confidence discrepancies did significantly predict cognitive anxiety.

In support of the first hypothesis, self-confidence discrepancies significantly predicted (an extra) 11% of performance variance over and above that of actual

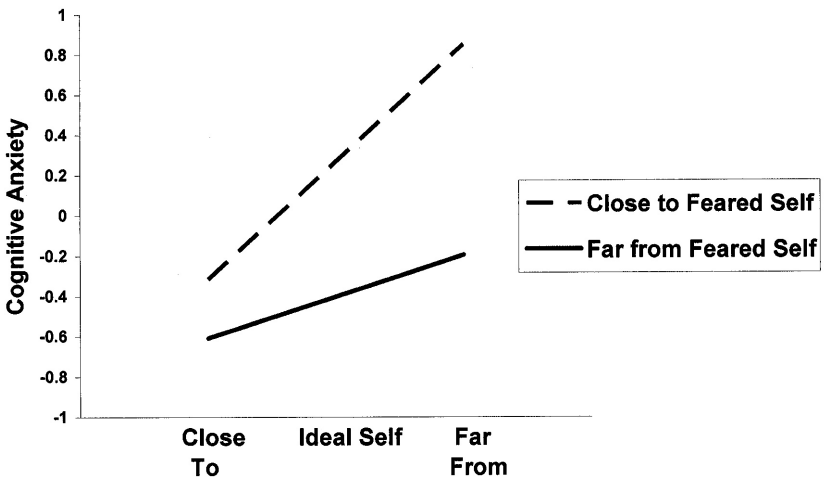

Figure 2 — Regression slopes (± 1 *SD*) showing the interaction between feared and ideal self-discrepancies upon cognitive anxiety.

self-confidence (Table 2). The beta coefficients indicated that only ideal discrepancies were significantly related to performance when the other discrepancies were controlled. In other words, the closer the participants were to their ideal level of self-confidence, the better they performed. As actual levels of self-confidence did not significantly predict performance (this finding is not new; e.g., see Woodman & Hardy, 2003), these results strengthen the earlier argument that self-confidence measures alone may not always be sensitive enough to predict performance.

The results for the second hypothesis revealed that the interaction significantly increased performance variance over and above that of the main effects for ideal and feared discrepancies by 9%. The interaction (see Figure 1) indicated that when performers were far from their feared self, discrepancies from the ideal self were more strongly related to performance times than when performers were close to the feared self. In other words, the closer participants got to their ideal self, the better they performed, thus supporting Bandura's (1977, 1986) self-efficacy theory. However, participants who were usually close to the feared self outperformed those who were far from the feared self, suggesting that negative affect may also play a part in producing better performances, thus also showing some support for Carver and Scheier's (1999) hypothesis.

The finding that ideal and not ought discrepancies were uniquely associated with cognitive anxiety can be explained in at least two ways. The original Selves Questionnaire (Higgins, Klein, & Strauman, 1985) asks individuals to create a list of 7 to 10 traits they think they actually have, ideally have, and ought to have. Discrepancies are then calculated by comparing the list for matches and opposites. This allows individuals to generate their own list of discrepancies. We restricted the responses of the participants to discrepancies in self-confidence levels only. Hence, in the analysis the participants of this study could only have ideal, ought, and feared self-confidence discrepancies.

Previous research (Martens et al., 1990; Woodman & Hardy, 2003) has shown a moderately significant negative correlation between self-confidence and cognitive anxiety, so that any discrepancies in self-confidence, whether from ought or ideal levels, might be expected to be associated with an increase in cognitive anxiety. In addition, according to Higgins (1999), the likelihood of finding specific affects with specific discrepancies depends on the significance of the discrepancy. This will include the magnitude, the accessibility, the relevance, and the importance of the self-discrepancy (see Higgins, 1999). Only magnitude was measured in this study, with the participants reporting an ought self-confidence discrepancy of 6.4 and an ideal self-confidence discrepancy of 8.8. According to Higgins (1999, p. 1314), "the greater the magnitude of a particular type of self-discrepancy, the more strongly the person will experience the emotion associated with that discrepancy." Therefore, if any discrepancy is likely to increase anxiety, the participants may have been merely responding to the discrepancy with the greater magnitude.

There was no support for the final hypothesis that there should be a significant interaction between feared and ought self-confidence discrepancies upon anxiety. However, feared and ideal discrepancies did significantly predict an additional 8% of the cognitive anxiety variance over and above that of self-confidence, with the interaction significantly predicting a further 3.4% of the variance (see Table 4). The nature of the feared/ideal cognitive anxiety interaction (see Figure 2) shows that when individuals were close to their feared self, the ideal self had a much stronger influence on cognitive anxiety than when they were far from their feared self.

An interesting pattern emerges when the two feared/ideal interactions are compared. In the cognitive anxiety interaction, when individuals are close to their feared self, the ideal self has a stronger influence on cognitive anxiety than when they are far from the feared self. However, the opposite results are shown in the performance interaction; that is, when participants are far from the feared self, the ideal self has a stronger influence on performance than when they are close to the feared self. This adds further support to the findings that cognitive anxiety and self-confidence are meaningfully distinct constructs (Woodman & Hardy, 2003). Hardy (1996) further states that future research should consider cognitive anxiety and self-confidence independently or as an interactive dyad, as good performance may be achieved when athletes are both high in cognitive anxiety and high in self-confidence.

A further point of interest throughout this study was the strength of the ideal discrepancy relationships with anxiety and performance, a finding that is contrary to the predictions of self-discrepancy theory. Recent research (Bruch, Rivet, Laurenti, 2000; Key, Mannella, Thomas, & Gilroy, 2000; Polasky & Holahan, 1998; Tangney, Niedenthal, Covert, & Barlow, 1998) has also found limited evidence for the *specific* predictions of self-discrepancy theory. Tangney et al. (1998) did not find the unique associations predicted by self-discrepancy theory between the type of self-guide (ideal or ought) and the specific type of affect (dejection or agitation). They found that only depression was associated with both ideal and ought discrepancies. Tangney et al. also noted that most of the people in their study did not easily distinguish well between ought and ideal discrepancies, which led the authors to suggest that the Selves Questionnaire may reveal a general type of discrepancy rather than two distinct "ought" and "ideal" selves. In support of this

finding, throughout our own data collection some individuals also seemed to have difficulty making the distinction between an ideal self and an ought self—with particular reference to "what is an ought self?"

At a theoretical level, the results show that by more explicitly taking the "self" into consideration, we can predict more performance variance and negative affect than is possible with actual self-confidence measures alone. As the competition setting is essentially about ego threat, or threat to the self, it may be illogical to continue to ignore the concept of self. Due to "ideal" discrepancies being particularly prominent throughout this study, it is important to understand which self-guides are important to different individuals and whether different domains play a moderating role in this. For example, Key et al. (2000) found that only the magnitude of the discrepancies was related to emotional discomfort in general.

Key et al. (2000) suggested that different types of discrepancy might be differentially important to various groups in the general population, and that different types of discrepancies may be linked to the specific types of affect (e.g., ideal discrepancy with dejection), but only under certain circumstances. Furthermore, Bruch et al. (2000) found that ought discrepancies were not related to agitation affects, and suggested that future research should explore the distinctiveness of different types of discrepancy in predicting negative affect relative to different domains of functioning. Higgins' (1997) regulatory focus model may also help explain these findings. In competition, athletes compete to win and to achieve self-set goals. Thus they are more likely to focus on gains, wins, and achievements (a promotion focus) than on preventing negative outcomes such as loss (a prevention focus). Furthermore, this promotion focus may be the reason why the present results revealed discrepancies from ideal selves to be more strongly related to affect and performance than discrepancies from the ought selves (we thank an anonymous reviewer for this suggestion). In other settings, for example health related exercise, this may not be the case.

The present results indicate that being far from an ideal self is associated with higher cognitive anxiety, especially when one is close to a feared self. Furthermore, being far from the ideal self is also associated with poorer performance, especially when one is far from the feared self. Coaches and sport psychologists should be aware of the nature of the self and be cognizant that self-reported self-confidence may not show the most complete picture of the performer's self-confidence. Furthermore, some athletes may only be motivated to attain certain self-guides (ideals or ought). For example, according to Higgins (1996), living up to an ideal usually means attaining something desired. On the other hand, living up to an ought usually means doing something to avoid disapproval from the self or others. Athletes' motivational reasons for participating in sport may strongly influence which self-guide, if any, they may want to attain.

To conclude, the findings reported here show that self-confidence self-discrepancies can predict significantly more performance variance than actual self-confidence (measures) alone. Of special interest was how "ideal" discrepancies were consistently related to performance and affect. In order to clarify these relationships, we need to consider other moderating variables such as motivation (reasons) or the performer's environment. Finally, specific self-guides might determine the type of intervention used to modify discrepancies to enhance the quality of an athlete's self-confidence.

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