The purpose of this study was to explore predictive paths between anxiety antecedents, state anxiety subcomponents and performance. Male triathletes (N=175) completed a modified Competitive State Anxiety Inventory-2 which included the original intensity scale and a direction scale (Jones & Swain, 1992) 1hr. prior to competition. They also completed a 23 item Prerace Questionnaire, which measured anxiety antecedents of triathlon. Factor analysis of the Prerace Questionnaire identified six factors, which were similar to those found by Lane, Terry and Karageorghis (1995). Path analysis to predict state anxiety from anxiety antecedents indicated that intensity responses were predicted by the perceived difficulty of race goals and perceived readiness. Direction responses were predicted by coach influence, recent form and perceived readiness. Path analysis to predict performance from state anxiety and anxiety antecedents indicated that recent form directly predicted performance without being mediated by anxiety responses. Anxiety responses did not predict performance. The findings support the notion that intensity and direction responses have different antecedents. It is suggested that future studies use anxiety antecedents which are specific to the sport environment to predict performance and anxiety responses.

In the development of the Competitive State Anxiety Inventory-2, Martens, Vealey & Burton (1990) stressed a need to separate anxiety responses into cognitive and somatic subcomponents. They argued that anxiety subcomponents are related to performance in different ways and are elevated by different antecedents (Liebert & Morris, 1967; Morris, Davis, & Hutchings, 1981). Cognitive anxiety is typified by worry and negative performance expectations, whilst self-confidence, typified by high beliefs in ability to perform to a desired standard. Both these subcomponents are believed to relate to factors in the environment which influence perceptions of success or failure. Self-confidence is believed to show a positive relationship with performance and cognitive anxiety is believed to show an inverse relationship with performance. Somatic anxiety, the physical manifestation of anxiety, is hypothezised to relate to conditioned responses to environmental stimuli, and show a curvilinear relationship with performance. Jones (1991) argued that the Competitive State Anxiety Inventory-2 measures the 'intensity' of anxiety symptoms and that high scores for may not necessarily have negative connotations. Jones (1991) proposed that the inventory should also assess how anxiety responses are perceived to affect performance, i.e., the degree to which the experienced symptom is either seen as facilitative or debilitative of performance.

The proposal that intensity perceptions of cognitive anxiety and self-confidence are related to perceptions of success and failure has been consistently reported across a range of different sports, wrestling (Gould, Petlichkoff & Weinberg), fencing (Hall & Kerr, 1994), cross country running (Hall, Mathews & Kerr, 1994), swimming (Hanton & Jones), games players (Jones, Swain & Cale, 1991), running; (Jones, Swain & Cale, 1990) and duathletes (Lane, Terry, & Karageorghis, 1995). The line of study initiated by Jones et al. (1990) which operationalised the antecedents of cognitive anxiety and self-confidence into a 19 item Prerace Questionnaire, faciltates a detailed analysis of the situational stressors between different sports. A comparison of the factor solution identified on middle-distance runners (Jones et al., 1990) and duathletes (Lane et al., 1995) indicates that participants from different sports which appear similar in nature, develop unique constructs of performance expectation. In particular, duathletes separate different components of perceived ability into two factors whereas in runners they are combined in one factor. Regression analyses using Prerace Questionnaire factor scores to predict anxiety subcomponents reveals that perceived readiness was influential in runners (Jones et al.,

(1990) , environmental factors influential in swimming (Hanton & Jones, 1994), and race goals and perceived readiness in duathlon (Lane et al., 1995).

Research to explore the proposal that somatic anxiety are related to non-evaluative conditioned responses to environmental stimuli has received less attention. Anxiety antecedents are typically operationalised through measures of perceived ability and perceived task difficulty, with a general failure to measure pre-conditioned responses. Research which has found no relationships between somatic anxiety and perceived ability and perceived task difficulty factors (Jones et al., 1990, Gould et al., 1984, Hall et al., 1994, Hall and Kerr, 1994), has been interpreted as supportive of multidimensional theory, although this has not been consistently reported (Hanton & Jones, 1994, Jones et al., 1991, Lane et al., 1995). Considering cognitive and somatic anxiety usually share a positive relationship, this increases the likelihood of findings common antecedents.

Hanton and Jones (1994) investigated the antecedents of direction perceptions of state anxiety subcomponents in elite and nonelite swimmers. Their analyses indicated that intensity and directional perceptions of anxiety subcomponents and self-confidence have different antecedents in both groups. Furthermore that different antecedents emerged between as predictors of anxiety subcomponents for both groups. Further analysis revealed that even though there were no differences between intensity scores, that the elite group perceived these levels of anxiety responses to be significantly more facilitative.

Research into the relationship between intensity measures of anxiety and performance has often found no relationships between anxiety scores and performance across a range of different sports, e.g. wrestling (Gould et al., 1984) gymnastics and golf (Krane & Williams, 1987), cross country running (Martin & Gill, 1991) and rugby (Maynard & Howe, 1987). Using a subjective performance criterion, Hammermeister and Burton (1995) found that cognitive anxiety negatively related with performance, although it did not predict finish position. Using an intra-individual research design, Burton (1988) found that all anxiety subcomponents significantly ($p<0.05$) related with performance, hence, consistent with multidimensional theory (Martens et al., 1990).

Research using the direction scale suggests that facilitative anxiety responses are associated with successful performance across a range of different sports, gymnastics (Jones, Swain & Hardy, 1993), basketball (Swain & Jones, 1994) and badminton (Eubank, Smith, & Smethurst), altthough Edwards and Hardy found that no directional anxiety

subcomponent predicted performance. Collectively, this research suggests that high levels in the intensity of anxiety perceptions and low intensity scores for self-confidence are not always detrimental to performance. This indicates that it may be the cognitive appraisal of the anxiety response which is important, hence, advocates that state anxiety should be measured using intensity and direction perceptions.

The purpose of this study was to explore the predicted paths between constructs of performance expectation for triathlon, state anxiety and performance. In addition, factor analysis on the Prerace Questionnaire in triathlon to examine the extent that sports which appear similar in nature, develop unique constructs of performance expectation. This extends the investigation into intensity and direction anxiety subcomponents to another sport, as advocated by Hardy and Jones (1994) and to an endurance sport by Hammermeister and Burton (1995).

Method

Subjects

Participants were 175 male triathlete volunteers ranging in age from 16 to 39 years (M age=28.18 yr., SD=5.33). They were moderately experienced having completed an average of 25 triathlons (SD=17.63) and moderately successful with an average personal best position of 24th (SD=39.07) Participants were drawn from two Olympic distance triathlons (1.5k swim/ 40k cycle/ 10k run) which were qualifying races for the 1994 World Championships.

Measurement of Anxiety antecedents

The antecedents of anxiety were measured using a modified Prerace Questionnaire (Jones et al., 1990). The original 19 item inventory organises items under three main headings. The first section headed “About the Last Few Weeks” includes items which rate recent form in training. Examples include “How well do you feel you have been performing in training during the last four weeks” and “How do you feel your coach has influenced your performance over the last four weeks”. The second section headed “The Last Race”, includes items such as “How did you feel about your position in the last race” and “How did your position relate to your Prerace expectations”. The third section headed, “The Next Race” included items such as “To what degree do you think you can achieve this position goal” and “How important is it for you do well in this next race”. All items are rated on a nine-point Likert type.

Factor analysis by Jones et al. (1990) produced six factors, termed: perceived readiness, attitude toward previous performance, position goal, coach influence, external environment, and time difficulty goal. Cronbach alpha (1951) estimate for internal consistency ranged from 0.63 to 0.78. Lane et al. (1995) used a 21 item questionnaire with ratings of cycle form, and the difficulty of the cycle course. Factor analysis indicated partial support for the factor structure found by Jones et al. (1990) although race goals loaded into one factor and perceived readiness divided into two factors; perceived readiness and recent form. Estimates of internal consistency ranged from 0.72 to 0.90. Variations in factor structure suggest that researchers should identify sport-specific performance expectation constructs, prior to relating these expectations to anxiety responses and performance.

Measurement of intensity and direction state anxiety

State anxiety was measured using a modified version of the Competitive Anxiety Inventory-2 (Jones & Swain, 1992) which has 27 items, with 9 items in each of three subscales: Cognitive anxiety, somatic anxiety and self-confidence. Examples of cognitive anxiety items include “I am concerned about this competition” and “I am concerned about not reaching my goal”, while somatic anxiety items include “My body feels tight” and “I feel jittery”. Self-confidence items include “I feel at ease” and “I’m confident I can meet the challenge”. All items in the intensity scale are rated on a four-point Likert type scale ranging from 1 (“not at all”) to 4 (“very much so”). Thus possible intensity scores on the three sub-scale range from 9 to 36. In the validation of the original Competitive State Anxiety Inventory-2 Martens et al. (1990) reported internal consistency coefficients ranging from 0.79 to 0.90 for intensity responses.

An additional scale has been constructed (Jones & Swain, 1992) beside each of the 27 items in which asked subjects rated the degree to which the symptom was perceived as either facilitative or debilitative to subsequent triathlon performance. The direction scale was rated on a scale from -3 (“very debilitative”) to +3 (“very facilitative”) thus direction scores range from -27 to +27. Research has shown a positive relationship between intensity and direction measures of self-confidence, no relationship between intensity and direction measures of cognitive anxiety and inconsistent findings for dimensions of somatic anxiety (Jones et al., 1993, Edwards & Hardy, 1994; Eubank et al., 1995).

Performance measures.

The vastly different degrees of course difficulty between the two races meant that it was inappropriate to use finish time, and hence, finish position was used as the measure of performance.

Procedure

The two scales were administered 1hr. prior to competition. Prior to completing the Questionnaires the Martens (1977) “antisocial desirability” statement was read aloud, using the protocol, “How are you feeling right now?”.

To assess the suitability of the factor structire of the Prerace Questionnaire for use with triathletes, data were subjected to Principal Component analysis and then rotated by varimax. The Cronbach alpha (1951) for internal consistency was calculated for those

factors. After, data were analysed using two path analysis models. The first predicted anxiety subcomponents from Prerace Questionnaire factor scoress; and the second predicted performance from anxiety subcomponents and Prerace Questionnaire factor scores. Path analysis used stepwise multiple regression repeated on significant predictors. The percentage of explained variance for each dependent variable is represented conservatively by the adjusted R^2. The strength and direction of the contribution by each predictor variable to changes in dependent measures is represented by Beta weights.

Results and Discussion

After eight multivariate outliers were identified and removed, the data were analysed.

Factor analysis of the Prerace Questionnaire

Factor analysis of responses to the Prerace Questionnaire produced six factors which accounted for 75.5% of the variance (see Table 1). Factor 1, termed, Attitude toward previous performance and factor 2, termed race goals are identical to that of Lane et al. (1995) and in the case of factor 1 to that identified by Jones et al. (1990. The nature of the race goals factor suggests that triathletes, like duathletes, do not clearly differentiate between competing against others (position goals) and competing against personal standards (time goals). As the competitors did not all begin the race simultaneously, interathlete comparison become difficult, hence time becomes the primary performance focus. The inclusion of the importance to perform well item suggests that triathletes, like duathletes (Lane et al., 1995) perceive the difficulty of the goal on line with how important it is to perform well.

Factor 3, termed recent form contained five items, three items assessed perceptions of form in swimming, cycling and running with and items which assessed perceptions of form in racing and training over the last four weeks. The items recent form in training also loaded into the attitude toward performance factor and running form into perceived readiness, but factor loadings and internal consistency coefficients suggest they were better placed in the recent form factor. The emergence of recent form is consistent with the factor analysis findings of Lane et al. (1995). The present analysis contrast with

findings from duathlon whereby all three components of triathlon performance were contained in a single factor as opposed to be divided into two factors. .

Factor 4, termed perceived readiness, included items related to perceived physical and mental readiness and run conditions. Factor five, termed environmental conditions contained assessments of swimming, cycling and running conditions along with the general suitability of weather conditions. Although the run conditions cross loaded into the perceived readiness factor, and factor loadings and internal consistency coefficients suggest it was better placed in the environment factor. The loading of all assessment of environmental conditions into one factor is consistent with findings in duathlon (Lane et al., 1990) and running (Jones et al., 1990). Factor six contained two items relating to the influence of a coach upon performance and is identical to that of Lane et al. (1995) and Jones et al. (1990).

Differences in the Prerace Questionnaire factor structure between triathlon, duathlon and running suggest that although they share the common element of running, and are all endurance based events, the competitors develop constructs of performance expectation which are unique to each. It is interesting to note that although competitors appear to separate performance components into different factors, they see all aspects of environment difficulty within one factor. The results of path analysis on both models are contained in Figure 1.

Descriptive statistics

Descriptive statistics for the two inventories are contained in Table 1. Prerace Questionnaire scores suggest athletes generally felt that they had performed adequately in their last race, that they had set difficult race goals which increased the more important it became to perform well; that current form in all three disciplines was going well, that they were physically and mentally ready for the race, that environment conditions were moderately suitable, and that the coach was not seen as particularly influential.

Scores on the Competitive State Anxiety Inventory-2 scores suggest average intensity symptoms were moderate but consistent with values for American triathletes competing in a longer event (Hammermeister & Burton, 1995); and higher than elite cyclists (Martens et al., 1990) and elite runners (Jones et al., 1990). Interestingly average scores for cognitive anxiety intensity were higher and self-confidence intensity lower than elite duathletes (Lane et al., 1995). As a number of subjects took part in both studies,

higher values for triathlon may be due to the importance of the races, where triathletes were competing for world championship qualifying places. Mean scores for Direction indicate that cognitive and somatic anxiety were perceived to be slightly more facilitative to performance, although considerable dispersion existed within the group. Self-confidence direction scores were more homogeneous.

Path Analysis Prediction of Anxiety Subcomponents

Path analysis to predict anxiety subcomponents from Prerace Questionnaire factor scores indicate that race goals were significant predictors of intensity perceptions of cognitive and somatic anxiety, and recent form were significant predictors of cognitive and somatic anxiety direction. Perceived readiness significantly predicted both intensity and direction perceptions of self-confidence. Race goals accounted for 13% of the variance in cognitive anxiety intensity scores, 7% of the variance in somatic anxiety intensity scores and together with perceived readiness, accounted for 20% of the variance in self-confidence intensity scores. Perceived readiness also accounted for 17% of the variance in self-confidence direction scores, Recent form accounted for 11% in the variance of somatic anxiety direction scores, and together with coach influence, 41% of the variance in cognitive anxiety direction scores.

The relationships indicate that as the perceived difficulty of race goals increased, anxiety intensity scores increased and self-confidence reduced. As perceived readiness increased so did the intensity and direction of self-confidence scores. As perceptions of recent form increase and in the case of cognitive anxiety as the coach was seen as influential, anxiety symptoms were viewed more positively.

The antecedents of intensity and direction perceptions of cognitive anxiety and self-confidence support Martens et al. (1990) multidimensional conceptualisation of the anxiety construct as they derive from an interaction between perceived ability and perceived task difficulty, (Gould, et al.; 1984; Hall & Kerr, 1994; Hall, et al., 1994; Hanton & Jones, 1994; Jones, et al., 1990, 1991; Lane, et al., 1995). The findings that somatic and cognitive anxiety intensity were predicted by race goals and that direction measures were predicted by recent form suggests that both anxiety components are mediated by self-evaluated constructs. This conflicts with the proposal (Martens et al., 1990) that somatic anxiety is induced by conditioned responses, supporting the findings of Jones et al., (1991 and Lane

et al., (1995). As there were significant relationships between cognitive and somatic anxiety intensity ($r = 0.68$, $p<0.01$) and between cognitive and somatic anxiety direction ($r= 0.70$, $p<0.01$) which are consistent with previous research (Martens et al., 1990) this clearly increases the probability that both anxiety subcomponents will be predicted by common antecedents.

The emergence of race goals as a consistent predictor of intensity perceptions of anxiety is consistent Crocker and Graham, (1995) who suggested that important goals elicit high emotional responses. As race goals predicted anxiety intensity subcomponents and recent form predicted direction components, this offers insight into the poposed balance between goal difficulty and goal attainability (Locke & Latham, 1985). Previous research has argued that goals which are seen as too difficult are demotivating due to increased anxiety levels (Hanton & Jones, 1994; Jones et al., 1990; Lane et al., 1995); As there was no significant relationship between cognitive anxiety intensity and direction ($r=0.07$, $p>0.05$) nor between somatic anxiety intensity and direction ($r=0.03$, $p>0.05$) this suggests that increased intensity anxiety subcomponents may not be viewed as detrimental to performance. The present study shows that increased anxiety due to difficult goals will only be seen as detrimental to performance when perceptions of recent form are low.

The different antecedents between triathlon, swimming (Hanton & Jones, 1994), and running (Jones et al., 1990) supports the notion (Lane et al., 1995) that although all are endurance based and contain either running or swimming, different sports involve different stressors (Martens et al., 1990). Although the Prerace Questionnaire factor perceived readiness has consistently predicted anxiety subcomponents, the items in the factor are specific to each sport.

Path Analysis to predict performance from anxiety subcomponents and anxiety antecedents revealed that recent form was the sole predictor of performance, accounting for 11% of the variance in finish position. Recent form predicted performance without being mediated by anxiety responses. The path coefficient indicated that as perceptions of recent form increased, performance improved. As recent form contained self-ratings of all three phases in triathlon, this reinforces the value of ascertaining constructs which are unique to each sport. This findings confirms the importance of measuring constructs of performance expectation which are unique to each sport, as recent form did not form part of the original Prerace Questionnaire (Jones et al., 1990).

The consistency of recent form in predicting direction components of state anxiety measures and finish position suggests that intervention strategies should be directed to reinforcing perceptions of ability. The influence of the coach suggested that encouragement increases perceptions of cognitive anxiety as facilitative.

The failure of any anxiety subcomponent to predict triathlon performance is consistent with Hammermeister and Burton (1995). In endurance sports like triathlon, measures of state anxiety may not be consistent predictors of performance due to the length and nature of the event. Terry (In press) argued that mood states are accurate monitors of performance in short duration sports of an explosive nature. It may be that this proposal applies to other emotional responses such as anxiety. As perceptions of recent form predicted performance, this suggests that triathletes make accurate judgements about their ability. These judgements appear to made using a comparison to the expected finishing position, hence, fast triathletes rate themselves 9 out of 9 for all disciplines and slow triathletes rate themselves 1 out of 9.

Conclusions

The findings indicated that intensity and direction state anxiety responses represent conceptually different dimensions, and consequently, are influenced by different antecedents. This supports the notion that direction perceptions clarify the multidimensional state anxiety response. As perceptions of recent form predicted finish position and mediate a positive interpretation of cognitive anxiety this indicates the importance of using a factor which is specific to triathlon in the path model. The emergence of unique performance expectation constructs for triathlon as anxiety antecedents suggests that these findings should not be generalized to similar sports. It is recommended that researchers develop sports-specific constructs of performance expectation.

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Path Analysis examining relationships among anxiety antecedents of intensity and direction anxiety subcomponents and performance

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How feel about last race position	5.98	2.21
How feel about last race time	5.94	2.00
Previous position/pre-race expectation	5.87	2.25
Previous time/ pre-race expectations	5.77	1.93
Can you achieve position goal	5.65	1.74
Can you achieve time goal	5.79	1.67
How difficult to achieve position goal	5.89	1.84
How difficult to achieve time goal	5.87	1.62
Importance to perform well	6.32	2.27
Training in the last 4 weeks	6.15	1.35
Racing in the last 4 weeks	6.10	1.67
How well running	5.91	1.84
How well cycling	6.34	1.55
How well swimming	5.71	1.92
Physical readiness	6.01	2.01
Mental readiness	6.16	1.98
Suitability of weather conditions	6.06	2.06
Suitability of running conditions	6.29	1.98
Suitability of swimming conditions	5.40	2.30
Coach influence last 4 weeks	5.10	2.35
Coach influence in the last race	3.80	2.39
Suitability of cycling conditions	6.12	1.84
Fatigued at the moment	3.46	1.84

Subjects: 293 Endurance athletes- recruited from races in the Pacific Northwest. Results reveal that anxiety did not impair performance. Triathletes were significantly more cog and som anxious than either runners or cyclists.

TABLE 1

DESCRIPTIVE STATISTICS FOR THE PRERACE QUESTIONNAIRE, COMPETITIVE STATE ANXIETY INVENTORY- AND PERFORMANCE

Variable	M	SD
Prerace Questionnaire		
Attitude toward previous performance	5.90	1.95
Race goals	5.90	1.28
Recent form	6.06	1.21
Perceived readiness	6.07	1.83
External conditions	5.94	1.55
Coach's influence	4.49	2.13
Competitive State Anxiety Inventory-2		
Cognitive anxiety intensity	17.51	5.88
Somatic anxiety intensity	16.48	6.46
Self-confidence intensity	24.29	5.59
Cognitive anxiety direction	1.39	10.27
Somatic anxiety direction	3.48	9.82
Self-confidence direction	11.38	8.93
Performance		
Finish position	122.61	105.18

Cronbach alpha estimate for internal consistency reveal high alpha coefficients ranging from 0.76 to 0.93

TABLE 2

FACTOR LOADINGS OF THE PRERACE QUESTIONNAIRE AFTER VARIMAX ROTATION

Variable	Factors						
	1	2	3	4	5	6	7
How do you feel about your time in the last race?	.89						
How did you position relate to your prerace expectation?	.89						
How did you time relate to your pre-race expectation?	. 88						
How do you feel about your position in the last race?	.85						
How difficult do you think it will be to achieve this time goal?		.87					
How difficult do you think it will be to achieve position goal?		.86					
To what degree do you think you can achieve this position goal?		.85					
To what degree do you think you can achieve this time goal?		.64					
How important is it to do well in this race?		.46					
How well have you been performing in training in the last 4 weeks?			.82				
How well are you cycling at the moment?			.79				
How well have you been performing in racing in the last 4 weeks?			.75				
How well are you swimming at the moment?			.61				
How well are you running at the moment?			.58				
Do you feel physically ready for this next race?				.85			
Do you feel mentally ready for this next race?				.82			
How suitable are swimming conditions for you in this next race?					.82		
How suitable are weather conditions for you in this next race?					.80		
How suitable are running conditions for you in this next race?					.63		
How suitable are cycle conditions for you in this next race?					.45		
How do you feel your coach has influenced your performance in the last 4 weeks?							.82
How do you feel your coach has influenced your performance in the last race?							.76

TABLE 3

CRONBACH ALPHA ESTIMATE FOR INTERNAL CONSISTENCY OF PRERACE QUESTIONNAIRE FACTORS

Factor	Coefficient Alpha
Attitude toward previous performance	.93
Race Goals	.76
Recent Form	.77
Perceived readiness	.81
Environment conditions	.75
Coach's influence	.73

Their analyses indicated that cognitive anxiety was predicted by perceived readiness, attitude toward previous performance, and position goal; and self-confidence by perceived readiness and external environment.

. Their analyses revealed that race goals and perceived readiness predicted all three anxiety subcomponents. Self-confidence was also predicted by attitude toward previous performance.

Mahoney and Avener (1977) indicated that high scores on anxiety measures were only detrimental to performance in gymnasts who viewed such symptoms as debilitative of performance.

An example of an intervention strategy which could increase the influence of the coach, increase perceived form and assist in setting realistic goals is the Performance Profile

method (Butler, 1989; Butler & Hardy, 1993; Jones, 1993). In addition, the notion that participants develop constructs of performance expectation which are unique to the sport suggests that the Profile is a logical extension of this as it develops personal constructs of performance (Kelly, 1955). The Profile works by developing personal constructs of their ideal performance which the subject uses as a criterion to rate how they are performing at the present. The difference between the current self and ideal self forms the basis of a goal setting programme. The development of a mental schema on how to perform closer to the ideal self through setting short and long term goals helps inculcate a view that form is improving and that difficult goals are attainable. Although the present study identified constructs specific to triathletes, the practical importance for intervention strategies may be to refine these by developing performance expectation constructs which are unique to the individual

elite group, cognitive anxiety intensity was predicted by perceived readiness and internal environment, but these predictors were not evident in the nonelite group.

Somatic anxiety intensity was predicted by position goal and internal environment for the elite group, for the nonelite group, it was predicted by attitude toward previous performance and internal environment.

Perceived readiness predicted self-confidence intensity for both groups, and self-confidence direction in the elite group.

Coach influence predicted direction perceptions of all anxiety subcomponents in nonelite swimmers, and in the case of self-confidence, also by attitude toward previous performance.

Modifications

Page 6.....is it for you to do well in this next race". All items are rated on a 9-point scale in likert format. The anchoring of the 1-9 scale varies from; 1 = "extremely poor" and 9 = "extremely well (3 items), 1 = "very negatively" and 9 = "very positively" (4 items), 1= "extremely disappointed" and 9 = "extremely pleased" (2 items), 1 = "not at all" and 9 = "extremely (5 items), 1 = "not at all" and 9 = "very much so" (2 items), 1 = "definitely no"

and 9 = “definitely yes” (2 items), 1 = “extremely easy” and 9 = “extremely difficult” (2 items) and 1 = “extremely poor” and 9 = “extremely well” (3 items).

Page 9...and competing against personal standards (time goals). Interestingly, as importance the perform well is associated with goal difficulty, suggesting that triathletes place equal value to finish time and position.