

**An evaluation of the reliability and validity of sport specific behavioral
checklists for volleyball, running, basketball, and swimming.**

By

S. Adrienne Leslie-Toogood

**A Dissertation Submitted in Partial Fulfilment of the Requirements for the
Degree of
DOCTOR OF PHILOSOPHY**

**Department of Psychology
University of Manitoba
Winnipeg, Manitoba**



**National Library
of Canada**

**Acquisitions and
Bibliographic Services**

**395 Wellington Street
Ottawa ON K1A 0N4
Canada**

**Bibliothèque nationale
du Canada**

**Acquisitions et
services bibliographiques**

**395, rue Wellington
Ottawa ON K1A 0N4
Canada**

Your file Votre référence

Our file Notre référence

The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-51652-0

Canada

THE UNIVERSITY OF MANITOBA
FACULTY OF GRADUATE STUDIES

COPYRIGHT PERMISSION PAGE

**An Evaluation of the Reliability and Validity of Sport Specific Behavioral
Checklists for Volleyball, Running, Basketball, and Swimming**

BY

S. Adrienne Leslie-Toogood

**A Thesis/Practicum submitted to the Faculty of Graduate Studies of The University
of Manitoba in partial fulfillment of the requirements of the degree
of
Doctor of Philosophy**

S. ADRIENNE LESLIE-TOOGOOD © 2000

**Permission has been granted to the Library of The University of Manitoba to lend or sell
copies of this thesis/practicum, to the National Library of Canada to microfilm this
thesis/practicum and to lend or sell copies of the film, and to Dissertations Abstracts
International to publish an abstract of this thesis/practicum.**

**The author reserves other publication rights, and neither this thesis/practicum nor extensive
extracts from it may be printed or otherwise reproduced without the author's written
permission.**

Table of Contents

List of Figures	7
List of Tables	8
Abstract	9
Introduction	10
<u>Clarifying the Difference Between Traditional Psychological Assessment and Behavioral Assessment</u>	10
The Causes of Problematic Behavior	12
The Goals of Assessment	13
Contributions of Traditional and Behavioral Assessment	14
<u>Traditional Psychological Assessment in Sport Psychology Consulting</u>	14
Tests of Personality Traits	16
Tests of Personality States	17
Traditionally-based Tests Developed Specifically for Sport	18
Problems with Traditional Psychological Assessment in Sport Psychology Consulting	19
<u>Across-Sport, Behavioral Assessment Measures</u>	20
<u>Sport Specific Behavioral Checklists</u>	22
Statement of Problem	27
Study One	29
<u>Method</u>	29
Participants	29
Participant Recruitment	30
Description of the Sport Specific and General Questionnaires	30
First Completion of Questionnaires by Athletes	32

First Completion of Questionnaires by Coaches	32
Second Completion of Questionnaires by Athletes	33
Second Completion of Questionnaires by Coaches	33
<u>Results</u>	34
Volleyball Players	38
Test-Retest Reliability	38
Face Validity	42
Do Volleyball Players want help from a Sport Psychologist	43
Convergent Validity	43
Volleyball Coaches	44
Test-Retest Reliability	44
Face Validity	45
Do Volleyball Coaches Feel their Athletes Would Benefit from Working with a Sport Psychologist	46
Are Volleyball Coaches Confident in their Ability to Evaluate Volleyball Players Mental Skill Strengths and Weaknesses	46
Runners	47
Test-Retest Reliability	47
Face Validity	48
Do Runners want help from a Sport Psychologist	49
Convergent Validity	50
Running Coaches	51
Test-Retest Reliability	51
Face Validity	51

Do Running Coaches Feel their Athletes Would Benefit from Working with a Sport Psychologist	52
Are Running Coaches Confident in their Ability to Evaluate Runners Mental Skill Strengths and Weaknesses	53
Open-ended Comments for the Volleyball and Running Sport Specific Questionnaires	53
<u>Discussion</u>	55
Study Two	59
<u>Method</u>	59
Participants	60
Participant Recruitment	60
Completion of Sport Specific and General Questionnaires by Athletes and Coaches	61
Description of the questionnaires Used to Evaluate Predictive Validity for Practices and Games/Races	61
Completion of Questionnaires by Athletes and Coaches Immediately after Practices and Games/Races	63
<u>Results</u>	66
Predictive Validity	66
Convergent Validity	68
<u>Discussion</u>	69
<u>Data Analysis Using Data from Both Studies</u>	70
Inferential Statistics	70
Familiarity with Sport Psychology Services	73
Use of Mental Skills	73

<u>Summary and Future Research</u>	76	
References	79	
Appendix A	Mean (and standard deviation) of the sport specific questionnaires for volleyball players, runners, swimmers, and basketball players	94
Appendix B	Mean (and standard deviation) of the retest sport specific questionnaires for volleyball players and runners	95
Appendix C	Mean (and standard deviation) of the sport specific questionnaires for volleyball, running, swimming and basketball coaches	96
Appendix D	Mean (and standard deviation) of the retest sport specific questionnaires for volleyball and running coaches	97
Appendix E	General questionnaire for athletes	98
Appendix F	General questionnaire for coaches	99
Appendix G	Information to cover during initial meeting with coaches	100
Appendix H	Consent forms	101
Appendix I	Researcher scripts	102
Appendix J	Modified general questionnaire for athletes	103
Appendix K	Modified general questionnaire for coaches	104
Appendix L	Convergent validity of the volleyball and running sport specific questionnaire	105
Appendix M	Items which were rated highly (i.e., '7', '8', or '9') on	

	the first and second administration of the sport specific questionnaires for volleyball players and runners	106
Appendix N	Test-retest reliability of sport specific questionnaire for volleyball players and runners	107
Appendix O	Test-retest reliability of the sport specific questionnaire for volleyball and running coaches	108
Appendix P	Questionnaires to measure predictive validity for basketball and swimming at practices	109
Appendix Q	Questionnaires to measure predictive validity for basketball and swimming at games/races	110
Appendix R	The items on the questionnaire used to measure predictive validity which were correlated with the practice section of the sport specific questionnaire	111
Appendix S	The items on the questionnaire used to measure predictive validity which were correlated with the competition section of sport specific questionnaire	112
Appendix T	Mean (and standard deviation) of predictive validity items for basketball and swimming	113
Appendix U	Predictive validity of the sport specific questionnaire for athletes (i.e., basketball players and swimmers)	114
Appendix V	Predictive validity of the sport specific questionnaire for coaches (i.e., basketball and swimming coaches)	115
Appendix W	Convergent validity of items on the questionnaire which were used to measure predictive validity	116

List of Figures

Figure 1	An overview of the studies	27
-----------------	-----------------------------------	-----------

List of Tables

Table 1	Articles on specific mental skills	24
Table 2	Items on sport specific questionnaire for volleyball players which correspond to specific areas of mental preparation	25
Table 3	Summary of the descriptive statistics for the sport specific questionnaire for volleyball players	35
Table 4	Summary of the descriptive statistics for the sport specific questionnaire for runners	36
Table 5	Summary of the descriptive statistics for the sport specific questionnaire for volleyball coaches	37
Table 6	Summary of the descriptive statistics for the sport specific questionnaire for running coaches	39
Table 7	Sample of questions which were used to evaluate predictive validity of the sport specific questionnaire for basketball players	64
Table 8	Timeline for questionnaire completion in the second study	65
Table 9	ANOVA (type * gender)	72
Table 10	ANOVA (gender * sport * level)	74

Abstract

When an athlete seeks help from a sport psychologist, one of the first priorities is to clarify the nature of the problem and to identify some target behaviors for treatment. Some sport psychologists have used traditional psychological instruments to evaluate the mental skill strengths and weaknesses of athletes. Other sport psychologists have raised concerns about the efficacy of this approach with elite athletes (Martin, 1997; Orlick, 1989; Rushall, 1979). The use of sport specific behavioral checklists has been suggested as a more effective alternative (Martin, 1997; Martin, Toogood, Tkachuk, 1997). Initial research on sport specific questionnaires for basketball players and swimmers has found the questionnaires to have high face validity and high test-retest reliability (Lines, Schwartzman, Tkachuk, Leslie-Toogood, Martin, in press). The current research involved two investigations. The first study evaluated the test-retest reliability, face validity, and a measure of convergent validity of sport specific questionnaires for two additional sports, running and volleyball (at both the highschool and university level). Overall, the test-retest reliability was moderate ($r=0.59$) for runners, and good ($r=0.78$) for volleyball players. There were low to moderate levels of test-retest reliability for most individual items, with higher levels of reliability for university-level athletes in both sports, and for the sport of volleyball (players and coaches). Face validity was found to be high for both sports at both levels (i.e., highschool and university), whereas the convergent validity was low. The second study examined the predictive validity of the sport specific questionnaires for basketball and swimming. The predictive validity was low, whereas the convergent validity of the questionnaires completed after practices and games/races included some items which were significantly correlated. Practical implications and recommendations are discussed for both studies.

Introduction

The development of behavioral assessment techniques has been integral to the success of behavior therapy with mental health problems, and similar options may be of value for sport psychology consulting. When an individual seeks help from a behavior therapist, one of the first priorities is to clarify the nature of the problem and to identify some of the target behaviors for treatment. In some cases the therapist might directly observe the client in natural settings. Often, however, neither the therapist nor the client have the time or resources for the therapist to observe the client in everyday situations in which the problem may occur. An effective alternative in many areas of mental health has been the use of self-report behavioral checklists to help clients identify problems of concern (Martin & Pear, 1999). This approach to behavioral assessment has been recommended for sport psychology consulting (Martin 1997; Martin, Toogood, & Tkachuk, 1997). Initial research on sport specific questionnaires for basketball players and swimmers has found the questionnaires to have high face validity and high test retest reliability (Lines, Schwartzman, Tkachuk, Leslie-Toogood, Martin, in press). Although initial research has been favorable, additional research is needed. This research involved two studies. The first study evaluated the test-retest reliability, face validity, and convergent validity of sport specific questionnaires for two additional sports, running and volleyball. The second study explored the predictive validity of the sport specific questionnaires for basketball and swimming.

Clarifying the Difference Between Traditional Psychological Assessment and Behavioral Assessment

According to Martin and Pear (1999), traditional psychological assessment originated with Freud and others who viewed abnormal behavior as a symptom of an underlying mental disturbance in a personality mechanism. As a result, a main

purpose of traditional psychological assessment was to identify the type of mental disorder or personality flaw which was assumed to underlie abnormal behavior (Martin & Pear, 1999). Behavioral assessment began to emerge in the 1960s as an alternative to traditional psychological assessment in response to discontent with some of the more traditional psychological measures (Martin & Pear, 1999). Most importantly, many behavioral psychologists viewed problem behaviors as important in and of themselves, and not as a symptom of some underlying trait or mental disorder (Fernandez-Ballesteros, 1993; Nelson & Hayes, 1986). As a result, in contrast to more traditional psychological measures, behavioral assessment includes identifying the problematic behaviors (in addition to both current environmental and organismic variables which may be contributing to or maintaining the problematic behavior), selecting an appropriate treatment strategy to modify the problematic behavior, and evaluating the effectiveness of that treatment strategy (Nelson & Hayes, 1979, 1986).

An increasing focus in the field of behavior therapy is the application of cognitive-behavioral methods and interventions within sport and fitness settings (Mahoney, 1989; Smith & Smoll, 1991; Suinn, 1989; Whelan, Mahoney, & Myers, 1991). In sport, behavioral assessment systems have been developed for use in both correlational and experimental research (Smith, Smoll, & Christensen, 1996). For example, overt behaviors of coaches have been assessed and related to other behaviors of interest such as children's recall of the behaviors, postseason measures of self-esteem, and their attitudes towards their coach (Curtis, Smith & Smoll, 1979; Smith, Smoll & Curtis, 1978; Smith & Smoll, 1990). Behavioral measures have also been used as checks on behavioral interventions which have targeted more indirect and less operationalized behaviors such as an athlete's enjoyment in their sport (Smith, Smoll & Curtis, 1979). With respect to the measurement of coaching

behaviors, a frequently used coding system (Smith & Smoll, 1990; Smith, Smoll, & Curtis, 1978; Smith, Zane, Smoll, & Coppel, 1983), the Coaching Behavior Assessment System (CBAS; Smith, Smoll, & Hunt, 1977), has also been developed.

In the past, traditional and behavioral assessment were differentiated on the basis of the types of assessment techniques that were used (Nelson, 1983). For example, direct observation of behavior in naturalistic or analogue situations, self-monitoring, participant observation, self-report in the form of questionnaires or interviews, physiological measures, and standardized tests are some behavioral assessment tools which were developed in the 1970s (Cone, 1978; Goldfried & Sprafkin, 1976). But, as noted by Nelson (1983), many of these techniques are also utilized in traditional psychological assessment (e.g., self-report in the form of questionnaires or interviews), and those which are seen as more behavioral in nature (e.g., direct observation) are infrequently used by some behavioral psychologists (Cone, 1993; Ford & Kendall, 1979; Swan & MacDonald, 1978) as they are often lacking in cost effectiveness and practicality. Therefore, rather than differentiating between behavioral and traditional psychological assessment by the methods or tools of assessment, Nelson (1983), Nelson and Hayes (1986), and Goldfried & Pomeranz (1968) suggested that the main difference between traditional psychological assessment and behavioral assessment lies in the assumptions underlying the assessment process. These differing assumptions include the causes of problematic behaviors and the focus or main goals of the assessment (Nelson & Hayes, 1979, 1986). These differences will be described in more detail in order to clarify the main differences between these two assessment approaches.

The Causes of Problematic Behaviors. As indicated, traditional psychological assessment places a stronger emphasis on intraorganismic causes of behavior. That

is, the philosophy behind traditional psychological assessment is that mental flaws or personality traits cause overt behavior. Therefore, behavior or appearance during assessment is interpreted as a sign of these underlying variables (Goldfried & Kent, 1972), and the focus of the assessment process is on what the person has (Mischel, 1968). Thus, traditional psychological assessment requires a high level of inference.

In contrast to traditional psychological assessment, most behavioral assessors assume that behavior (both overt and covert) is a result of current environmental factors, or current environmental factors interacting with organismic variables (including both physiological variables and past learning history) (Nelson & Hayes, 1986). Therefore, behavior during assessment is viewed as a sample of responding in a particular assessment situation (Goldfried & Kent, 1972), and the focus of the assessment process is on what the person does rather than what the person has (Mischel, 1968). Thus, behavioral assessment requires a lower level of inference compared with more traditional assessment approaches.

The Goals of the Assessment. One of the main goals of traditional assessment has been to describe personality traits and to diagnose or classify abnormalities (Hartmann, Roper, Bradford, 1979). Therefore, traditional assessment is nomothetic in that it focuses on commonalities within groups of people and on differences between groups of people (Nelson & Hayes, 1986).

In behavioral assessment, the focus of the assessment process is idiographic in that for each client, target behaviors are identified, treatment strategies are selected, and outcome measures are determined. Although the principles and findings of nomothetic research may help in the identification of target behaviors and treatment strategies, nomothetic findings are applied cautiously to individual clients (Nelson & Hayes, 1986).

Contributions of Traditional and Behavioral Assessment. Although the underlying beliefs in traditional and behavioral assessment differ, both have contributed to each other in several ways. First, traditional assessment has contributed to behavioral assessment in the following ways: (a) the use of normative data has allowed behavioral assessors to select target behaviors which deviate from the norm and to determine whether problematic behaviors fall within normal parameters at the conclusion of treatment; (b) nomothetic data has provided behavioral assessors with information about response covariation, typical controlling variables, and treatments that have a history of success for particular problematic behavior; and (c) diagnostic labels are useful for professional communication, statistical record keeping, and reimbursement from insurance companies (Nelson & Hayes, 1986). Second, the contributions of behavioral assessment to all orientations of assessment include the recognition that: (a) behaviors are important to measure in and of themselves; (b) assessment must frequently occur at the individual level; and (c) the principle of situation specificity must be applied both to our assessment devices as well as to our clients (Nelson, 1983).

The above briefly clarifies some of the main differences between traditional psychological assessment and behavioral assessment. In addition, a list of some of the contributions of each approach to the overall assessment process has been provided. Now that the differences between traditional and behavioral assessment have been clarified, traditional psychological assessment within sport psychology will be evaluated.

Traditional Psychological Assessment in Sport Psychology Consulting

According to Heil and Henschen (1996), the first significant milestone in psychological testing in sport was when Coleman Griffith developed psychological

questionnaires and surveys to assess attitudes, perceptions, and personality characteristics of athletes and coaches in the 1930s. Heil and Henschen suggested that the second major milestone was the development of the Athlete Motivation Inventory (Tutko, Lyon, Oglivie, 1969) which measured several variables including aggressiveness, coach-ability, and trust. Following this, the 1970s saw the emergence of a debate in which sport psychology practitioners argued over whether there was, in fact, an ideal sport personality (see Mahoney & Epstein, 1981; Straub, 1978). State measures such as the Profile of Mood States (McNair, Lorr, & Droppleman, 1971) and the State Trait Anxiety Inventory (Spielberger, Gorsuch, & Luschene, 1970) began to be applied to the assessment of elite athletes in the 1970s. Lastly, several instruments were developed specifically for sport within the 1980s and 1990s. Some of these include the Test of Attentional and Interpersonal Style (Nideffer, 1976), the Competitive State Anxiety-Inventory-II (Martens, Vealey, & Burton, 1990), and the Psychological Skills Inventory for Sports (Mahoney, Gabriel, Perkins, 1987). These milestones are more traditionally-based methods of assessment in that they place a strong emphasis on the intraorganismic causes of behavior, one of the main purposes of assessment was to describe personality states or traits, and the quality of the assessment techniques was judged through the psychometric evaluation of the assessment instruments.

Currently, there are many assessment instruments available to sport psychology practitioners (Anshel, 1987; Ostrow, 1990). In 1987, Anshel published a list of 126 tests for which there is some psychometric data available. In addition, Ostrow (1990) identified 175 tests which are currently being used by sport psychologists. Some of the categories in which assessment tools are available include aggression, attention, anxiety, confidence, cohesion, imagery, motivation, and

cognitive strategies (Ostrow, 1990).

A proliferation of available tests leads to the question of what areas are being most frequently assessed, using traditional assessments, within sport psychology. One way of answering this question is to explore which areas are found most often in the literature. In a review of the literature from 1989 - 1992, Fogarty (1995) found that the majority of the research was on anxiety, followed by personality, attentional style, and motivation. However, Fogarty (1995) noted that several mental skills which are important to sport psychology consultants (such as goal-setting) were not present as frequently in the literature, because they are not as amenable to psychometric evaluation. At this point, the utility of a few of the most frequently used traditional psychological assessment tools within sport psychology consulting will be reviewed.

Tests of Personality Traits. Considerable research on trait measures of personality within sport has used the Minnesota Multiphasic Personality Inventory (Booth, 1958; Geron, Furst, Rotstein, 1986; LaPlace, 1954; Morgan & Johnson, 1978; Williams & Youssef, 1972), 16 Personality Factor Questionnaire (Evans & Quarterman, 1983; Thakur & Ojha, 1981; Williams & Parkin, 1980), and Eysenck Personality Inventory (Eysenck, Nias & Cox, 1982; Morgan, 1968). The results which were obtained using the above measures of personality traits in athletes were highly inconsistent (LeUnes & Nation, 1989). LeUnes and Nation (1989) hypothesized several reasons for these inconsistencies such as psychometric difficulties, interpretative error, widely varying athletic groups and cultural inconsistencies. Additional concerns, mentioned by LeUnes & Nation (1989), include the lack of usefulness of nonsport normed tests with a sport population, and the highly clinical nature of these instruments.

Within the study of personality traits lies the previously mentioned debate of

whether or not there is an ideal sport personality, that is, a personality makeup which enables an athlete to be successful. Another concern related to either state or trait measures within sport is the failure of researchers to differentiate between the use of the measures to identify differences between athletes and nonathletes versus the use of the tests to differentiate between successful and unsuccessful athletes (Renger, 1993). LeUnes and Nation (1989) and Renger (1993) suggested that while traditional psychological assessment tools may be able to differentiate between athletes and nonathletes on some dimensions (e.g., POMS iceberg profile), they do a poorer job of discriminating between those athletes who will and will not be successful. Furthermore, the utility of this information for the development of an individualized sport psychological intervention has been questioned (Orlick, 1989).

Tests of Personality States. Another area of traditional assessment in sport psychology includes the evaluation of personality states. As opposed to traits, states are less enduring and more transient or temporary in nature (LeUnes & Nation, 1989). Research on personality states in sport has used instruments such as the State-Trait Anxiety Inventory (STAI; Spielberger, Gorsuch, Lushene, 1970) and the Profile of Mood States (POMS; McNarr, Lorr, & Droppleman, 1971).

With respect to the STAI, Klavora (1975) found the STAI was sensitive to increases in state anxiety in response to competitive stress in high school football and basketball players. As well, subjects with high trait anxiety experienced significantly higher elevations than did low trait subjects. Many additional studies have found support for the STAI as a measure of both state and trait anxiety in athletes (Powell & Verner, 1982; Sanderson & Ashton, 1981).

Several studies have investigated the profile obtained on the POMS by elite athletes in sport (LeUnes & Nation, 1982; Morgan, 1968, 1978). It was determined that

high-level performers normally achieved mood states above the mean in vigour, and below the mean in tension, anger, depression, fatigue, and confusion. This shape has been called the "iceberg profile" (Heil & Henschen, 1996). Although research has demonstrated that elite athletes attain the iceberg profile on the POMS relative to a nonathletic normative sample, a review by Renger (1993) suggested that the POMS is of limited value in differentiating between successful and unsuccessful athletes. As previously discussed, this is a common problem within the traditional assessment literature. Terry (1995) stated that the inability of tests to differentiate between more and less successful athletes may be related to the sport specific demands of each sport. That is, there is substantial variation between sports in terms of desirability of specific mood factors (Terry, 1995). For example, contrary to the iceberg profile, success in cross country running has been shown to be associated with elevated anger scores (Cockerill, Nevill, Lyons, 1991). In addition, Terry (1995) suggested that within group variation may also contribute to difficulties in identifying an ideal sport state. As Terry indicated, some athletes perform well in their sport despite rather negative mood and other personality states.

Traditionally-based Tests Developed Specifically for Sport. As indicated in the overview of traditional assessment in sport psychology consulting, several instruments were developed specifically for sport during the 1980s and 1990s (Ostrow, 1990). Some of the tests designed specifically for sport include the Athletic Motivation Inventory (AMI; Tutko, Lyon, Oglivie, 1969), the Sport Competitive Anxiety Test (SCAT; Martens, 1977), the Competitive State Anxiety Inventory - II (CSAI-II; Martens, Burton, Bump, Vealey, Smith, 1982), and the Test of Attention and Interpersonal Style (TAIS; Nideffer, 1976). Although other sport psychologists have referred to the TAIS as a behavioral measure, I have classified the TAIS as being traditional because it is based

on underlying personality states and its utility has been measured by psychometric properties. The TAIS is, however, more behavioral than several other psychological tests (e.g., MMPI, 16PF, EPI, etc.) which have been mentioned in this paper. At this point, research on the TAIS will be briefly explored.

The TAIS was developed by Nideffer (1976) in order to measure attentional style or focus. The TAIS was designed to measure attention along two dimensions, width (broad to narrow) and direction (internal to external). The TAIS is a 144-item, self-report measure which takes approximately 25 minutes to complete and measures 17 attentional and interpersonal factors.

The research on the utility of the TAIS has been equivocal. Several studies have questioned the predictive ability (see Dewey, Brawley, Allard, 1989) and factorial validity (see Ford & Summers, 1992) of the TAIS, whereas others support its psychometric properties (see Nideffer 1990). Nideffer (1987, 1990) suggested that, regardless of its psychometric properties, the TAIS is still a useful tool for sport psychology consultants and it is one of the most widely utilized sport psychological assessment tools. Further supporting the utility of the TAIS is the fact that several sport specific versions have been developed (Albrecht & Felts, 1987; Vallerand, 1983; Van Schoyck & Grasha, 1981).

Problems with Traditional Psychological Assessment in Sport Psychology Consulting. As indicated, some of the difficulties with traditional measures in sport psychology consulting include the application of nonsport normed tests, inconsistent findings, and the clinical make-up of most of the items on tests of personality traits (LeUnes & Nation, 1989). As well, some of the traditionally-based tests have been shown to have questionable psychometric properties (Dewey, Brawley, Allard, 1989; Vallerand, 1983), and/or limited ability to differentiate between more and less

successful athletes (Renger, 1993; Terry, 1995). Another area of concern with traditional psychometric tests concerns the usefulness of these instruments when working with elite athletes (Orlick, 1989). As Orlick stated:

Individuals are different, their needs are different, situations are different. Standardized inventories do not tap the unique individual perceptions of situations or identify specific problems that occur only under specific circumstances. Nor do standardized inventories identify individual sport psych strengths or tell you how to solve the situation-specific problems or questions that athletes have (p.359).

Therefore, according to Orlick (1989), instruments which evaluate broad psychological characteristics may have limited utility when trying to develop an individualized performance enhancement program. This point of view is further supported by Martin (1997), Kane (1980), Morgan (1980), and Rushall (1973). It is for this reason that many sport psychology consultants have turned to the next method of assessment, across-sport measures of mental skill strengths and weaknesses.

Across-Sport, Behavioral Assessment Measures

Across-sport measures of mental skill strengths and weaknesses include interviews, open-ended questionnaires (see Orlick, 1986, 1990), and behavioral checklists (see Nideffer, 1976b; Rushall, 1979). These assessment techniques are general or across-sport measures in that the same questionnaire or interview would be used for any athlete, regardless of the sport in which they are a participant. These methods of evaluation are considered more behavioral in nature because they are

idiographic, and they evaluate problematic behaviors rather than personality states or traits. One across-sport measure used by sport psychology consultants is performance profiling (see Butler & Hardy [1992], and Kelly [1955]).

According to Butler and Hardy (1992), performance profiling is a technique in which the athlete is asked to identify the qualities and characteristics of an elite athlete in their sport. The athlete is then asked to evaluate their current level of mastery on each of these dimensions. The result of the above two steps is a profile of the perceived strengths and weaknesses of an athlete. From this, a sport psychology consultant can work with the athlete to develop an individualized mental preparation program. Jones (1993) discussed the successful application of a cognitive behavioral intervention to a female racquet sport athlete through the use of performance profiling as an assessment tool. In addition, Dale and Wisberg (1996) suggested that performance profiling can be used to facilitate communication between coaches and athletes. Research on performance profiling has found it to have good construct validity (Doyle & Parfitt, 1997), and predictive validity (Doyle & Parfitt, 1996). However, some questions were raised about the ability of the performance profiling technique to detect subtle, but important, changes in performance and perceived need (Doyle & Parfitt, 1997).

Although not necessarily applicable to performance profiling, the following are some general concerns with respect to the use of across-sport measures in sport psychology consulting. The main problem with the use of such instruments is that the questionnaires may lack face validity (Lines et al, in press). For example, all of the items on a particular questionnaire may not apply to a particular sport. Some additional concerns are that many of these tests have not been empirically validated, and many have not been developed from a sound theoretical foundation (Gauvin &

Russell, 1993).

Sport Specific Behavioral Checklists

As an alternative to both traditional assessment and more behavioral across-sport measures, individualized sport specific behavioral checklists have been developed for 21 different sports (Martin et al, 1997).

An individualized sport specific behavioral checklist lists performance aspects of practices and competitions for a particular sport that an athlete can easily check off or identify in order to provide a quick, convenient, and yet reasonably thorough assessment of those areas in which an athlete would like help (p. 2).

These checklists are individualized in that there is a different sport specific behavioral checklist designed for each sport, with each checklist containing both questions and examples which are applicable to that sport. For example, a checklist for figure skating would contain situations and examples relevant to figure skating, whereas a checklist for ice hockey would contain examples relevant to that sport. The checklists are also individualized in the sense that the athlete's responses to the questionnaires provide a few areas or target behaviors in which an athlete would like help. The individualized sport specific behavioral checklists do not have norms, and they are not designed to measure character or personality traits. Although these checklists contain user-friendly jargon, they are based on the principles of behavioral analysis (Martin, 1997; Martin et al, 1997).

The items included in the sport specific questionnaires were selected by reviewing the literature on the psychological skills of exceptional athletes (Greenspan & Feltz, 1989; Mahoney, Gabriel, Perkins, 1987; Orlick & Partington, 1988). Literature

in this area suggests that there are specific psychological skills which differentiate between an individual athlete's best and worst performances, and those athletes who do and do not perform up to their potential at competition. Psychological skills which are found to differentiate between peak and nonpeak performers include imagery, goal-setting, confidence, self-talk, concentration, focusing, precompetition plans, competition plans, a plan for dealing with distractions, competition evaluation, using mental skills and self-management strategies to have quality practices, simulation training, emotional control, and arousal or anxiety management (Greenspan & Feltz, 1989; Mahoney, Gabriel, Perkins, 1987; Orlick & Partington, 1988). Information about each of these areas of mental preparation is provided in the list of articles in Table 1 (see Table 1).

Since the above items were shown to differentiate between peak and nonpeak performers, several questions were developed to assess whether an athlete needed help in each of these areas. These questions were then compiled and organized to assess deficits and strengths at practices, competitions and in post-competition evaluations. Appendix A includes sport specific questionnaires for volleyball, running, basketball, and swimming (see Appendix A). To give you a feel for how the sport specific questionnaires evaluate each area of mental preparation, Table 2 contains a list of which items on the sport specific questionnaire for volleyball players (contained in Appendix A) evaluate specific mental skill areas (see Table 2). Each sport specific questionnaire contains similar questions to evaluate each of the mental skill areas. After the format for the sport specific questionnaires was developed, the items and examples on the sport specific behavioral checklists were reviewed and revised by an individual with expertise in that particular sport. Last, the items were further refined by the authors based on their experience in sport psychology consulting.

Table 1

Articles on Specific Mental Skills

Mental Skill	Articles on this Mental Skill
Imagery	Feltz & Landers, 1983; Murphy, 1994; Murphy & Jowdy, 1992; Rawlings, Rawlings, Chen, & Yilk, 1972; Weinberg, 1981.
Goal-setting	Burton, 1989, 1992; Gould, Tammen, Murphy, & May, 1989; Weinberg, 1994; Weinberg, Stichter, & Richardson, 1994.
Self-talk	Bell, 1983; Johnston-O'Conner & Kirschenbaum, 1986; Kirschenbaum, Ordman, Tomarken, & Holtzbauer, 1982; Rushall, Hall, Roux, Sasseville, & Rushall, 1988; Straub & Williams, 1984; Streat & Roberts, 1992; Van Raalte, Brewer, Rivera, & Petitpas, 1994; Whelan, Mahoney, & Meyers, 1989.
Concentration Focus, & Distractors	Nideffer, 1981, 1985, 1993; Osborne, Rudrud, & Zezoney, 1990; Rushall 1992; Schmid & Peper, 1993; Ziegler, 1994.
Reacting to Game	Osborne, Rudrud, & Zezoney, 1990; Ziegler, 1994.
Emotional management	Averill, 1982; Ebbesen, Duncan, & Konecni, 1975; Hazaleus & Deffenbacher, 1986; Silva, 1982; Tavis, 1984.
Arousal management	Harris & Williams, 1993; Landers & Boutcher, 1993.
Confidence	Gould, Hodge, Peterson, & Gianni, 1989; McAuley, 1985; Moritz, Hall, Martin, & Vadocz, 1996; Weinberg & Gould, 1995 (pp. 299-316).
Communication	Anshel, 1990; Carron, 1988; Connelly & Rotella, 1991; Martens, 1987; Orlick, 1986, 1990; Rosenfeld & Wilder, 1990; Smith, Small, & Curtis, 1979.
Pre-competition Plan	Boutcher & Crews, 1987; Cohn, Rotella, & Lloyd, 1990; Orlick, 1986; Ravizza & Osborne, 1991.
Quality Practice	Bell, 1983; Ericsson, Krampe, & Tesch-Romer, 1993; Gould, 1992; Harris & Harris, 1984; Hayes, Rosenfarb, Wulfert, Munt, Korn, & Zettle, 1985; Martin, LePage, & Koop, 1983; Seidentop, 1980; Weinberg & Gould, 1985.
Simulation	Martin, 1996 (p. 190-198); Orlick & Partington, 1988.
Post Competition Evaluation	McCaffrey & Orlick, 1989; Orlick, 1986, 1989; Orlick & Partington, 1988.

Items on the Sport Specific Questionnaire for Volleyball Players which Correspond to Specific Areas of Mental Preparation

Mental Skill	Item on Questionnaire from Game Section	Item on Questionnaire from Immediately After Game Section	Item on Questionnaire from Practice Section
Imagery			14
Goalsetting	16		1
Selftalk	1, 2		13
Focus	9	2	5, 12, 15
Concentration	5		4
Distractors	6, 7, 8		12
Reacting to Game	12, 13		
Emotional management	14		7, 8
Arousal management	3, 10		
Confidence	4		
Communication	11, 19, 20	4	
Pre-competition Plan	17, 18	3	
Quality Practice			2, 3, 6, 9, 10
Simulation			16, 17
Post Competition Evaluation		1, 2, 3, 5	
Practice Mental Skills			11

Although each of the questionnaires contains examples peculiar to an individual sport, each questionnaire has the following format: (a) 20 items to identify areas in which an athlete may need to improve before or during a competition, such as maintaining concentration, blocking out distracters, staying relaxed, and managing troublesome emotions; (b) 5 items to identify areas in which an athlete may need to improve concerning post-competition evaluation of mental preparation and performance; and (c) 17 items to identify areas in which an athlete may need to improve at practices, such as arriving at practice totally committed to doing one's best, making better use of full practice time, and using key words and self-talk to improve one's skills.

A recent review of the sport specific behavioral checklists was very positive (Smith & Little, 1998). Smith and Little (1998) stated that

athletes who complete these forms should find them face valid and user-friendly...completing the scales should prove useful not only in helping athletes become more self-aware but also for the setting of specific intervention goals (p. 105).

In addition to the face valid and user friendly nature of the sport specific behavioral checklists, Martin (1997) suggested several additional benefits of these individualized questionnaires. These include the fact that the checklists can be completed at home, saving both time and money. The checklists may be somewhat less threatening than an intake interview, making it easier for some athletes to indicate their needs. The checklists can be re-administered at different points of an intervention as a way of monitoring progress. Lastly, Martin (1997) suggested that having athletes, coaches, and parents complete similar questionnaires will provide a sport psychological consultant with multiple perspectives on potential problems (e.g., see Martin & Toogood, 1997). Many of these benefits apply to the previously mentioned technique of performance profiling (Butler & Hardy, 1992). The main

benefits of the sport specific behavioral checklists over performance profiling are that the checklists: (a) ensure that all areas of mental preparation are evaluated; and (b) provide sport specific examples.

Preliminary research on the sport specific behavioral checklists for basketball and swimming found these questionnaires to have face validity and high test-retest reliability (Lines et al, in press). Furthermore, research on the sport specific questionnaire for figure skating evaluated the convergent validity of the checklist by comparing the responses of a group of skaters, their coaches, and their parents (Martin & Toogood, 1997).

Statement of the problem

As indicated, initial research on sport specific questionnaires for basketball players and swimmers found them to have high face validity and high test-retest reliability (Lines et al, 1997). Although initial research has been favorable, more research is needed on the psychometric properties of these questionnaires. Research is also needed to establish the reliability and validity of the behavioral checklists for other sports. In order to address both of these needs, two studies were conducted (see Figure 1). The first study evaluated the test-retest reliability, face validity, and convergent validity of the sport specific behavioral checklists for two additional sports, running and volleyball. The second study examined the predictive validity of the sport specific behavioral checklists for basketball and swimming, as high face validity and test-retest reliability was already established for these questionnaires. It is important to note that, although these questionnaires were designed from a behavioral perspective, more traditional behavioral assessment techniques such as the use of single subject experimental designs were not used in this study. Rather, psychometric techniques were utilized as it was felt that the information which was gathered (namely, whether or not the athletes and coaches responded consistently to

Study One

(Test-retest Reliability, Face Validity, and Convergent Validity of Behavioral Checklists for Running and Volleyball)

A. Participants (A total of 82 participants, 44 male & 38 female)

Runners (42 runners [12 high school, 20 university, 10 other]) & their 3 male coaches

Volleyball players (40 players [16 high school, 24 university]) & their coaches (3 male & 1 female)

B. Phases

Time #1 Completion of a general and the sport specific questionnaires

Two weeks later Completion of a modified general and the sport specific questionnaires

Study Two

(Predictive Validity of the Behavioral Checklists for Basketball and Swimming)

A. Participants

Basketball players (3 male & 7 female) & their coaches (2 male & 1 female)

Swimmers (3 male and 3 female) & their female coach

B. Phases

Time #1 Completion of a general and the sport specific questionnaires

After 3 practices Completion of predictive validity questionnaires

After 3 games/races Completion of predictive validity questionnaires

Figure 1. An overview of the studies.

the items on separate occasions, and whether or not the coaches and athletes responded similarly in terms of areas in which the athlete needs help) was important for applied practitioners whether or not they endorsed a behavioral or a psychometric background.

Study One

This study involved the completion of a general (see Appendices E and F) and a sport specific (see Appendices A, B, C, and D) questionnaire by both the athletes and their coaches on two separate occasions. The athletes responses were used to evaluate the face validity and the test-retest reliability of the sport specific questionnaire for each sport. As well, the athletes and coaches responses to a sport specific questionnaire were compared as a measure of convergent validity.

Method

Participants

A total of 40 volleyball players participated in this study, including 16 (10 male and 6 female) at the high school level, and 24 (12 male and 12 female) at the university level. The high school volleyball players ranged in age from 15 to 17 (mean = 16.2), whereas the university volleyball players ranged in age from 18 to 27 (mean = 20). The high school volleyball players spent a mean of 9.2 hours involved in sport-related activities each week, while the university volleyball players spent a mean of 19 hours in such activities.

A total of 42 runners participated in this study, including 12 (8 male and 4 female) at the high school level, 20 (9 male and 11 female) at the university level, and 10 (5 male and 5 female) at either the junior high school or senior level. The high school runners ranged in age from 15 to 18 (mean = 16.3), whereas the university runners ranged in age from 18 to 26 (mean = 20.4). Of the junior high school runners,

the youngest participant was 11 years of age, while the oldest senior level runner was 42. The high school runners spent a mean of 15.6 hours involved in sport-related activities each week, while the university runners spent a mean of 11.3 hours in such activities.

In addition to the athletes, their coaches were asked to participate in various parts of this study. A total of 3 (all male) running coaches, and 4 (3 male and 1 female) volleyball coaches completed questionnaires on their athletes. These coaches had coached at this level for a mean of 11 (range from 2 to 18) years, and spent an average of 25.6 (range from 6 to 42.5 hours) hours per week on coach-related activities.

Procedure

Participant Recruitment. Prior to the study, the researcher solicited participation by phoning the coaches and describing the purpose of the study, requirements of participants, and the benefits of participation. At this time, the researcher scheduled an initial meeting with each of the coaches. During the initial meeting, the researcher further elaborated upon the procedure, and emphasized areas which were important to ensure treatment integrity (see Appendix G). The researcher also provided the coach with necessary sample questionnaires, gave athlete consent forms to the coach (see Appendix H), and confirmed the dates during which data would be collected. The coach was required to administer and collect consent forms from the athletes prior to the beginning of data collection. There was one consent form for participants over the age of 18 and one for participants under the age of 18.

Description of the Sport Specific and General Questionnaires. The sport specific questionnaires in this study (i.e., for volleyball players and distance runners, see Appendix A) asked the athlete to evaluate each item on 4, separate, 9-point Likert-

type scales. Each scale was sport specific, for example the 4 scales on the sport specific questionnaire for volleyball players were: (a) "is this item important for volleyball players"; (b) "is this something that most volleyball players need to improve on"; (c) "is this something you need to improve on"; and (d) "if you need to improve, and if a sport psychologist was available, would you like some help". A sport specific questionnaire in this study took each athlete approximately 15 minutes to complete. The sport specific questionnaires completed by coaches were modified so that coaches could evaluate the mental skill strengths and weaknesses of the athletes whom they coached (see Appendix C). These coach questionnaires included the same items as the athlete questionnaires, and they also required approximately 15 minutes to complete per athlete. In addition to the above four scales, the coaches were asked to evaluate each item on a fifth scale. The fifth scale asked each coach to indicate how confident they were in responding to each item on the sport specific questionnaire (see Appendix C). This fifth scale was thought to be important because the coaches were required to evaluate many covert behaviors for which it is impossible to have direct access.

A general questionnaire was also completed by the athletes and coaches in this study (see Appendices E and F). These questionnaires asked the athlete or coach to provide information on demographics, the demands of their sport, their familiarity with sport psychology consulting, and their knowledge of mental skills. In addition, the general questionnaires asked each athlete or coach whether problematic areas in the athlete's lives, such as excessive nervousness, interfered with other areas of that athlete's life such as sleeping and emotional well being. The general questionnaires for athletes and coaches took approximately 10 and 5 minutes to complete, respectively.

First Completion of Questionnaires by Athletes. As indicated, the first study involved the completion of sport specific (see Appendices A, B, C, and D) and general (see Appendices E and F) questionnaires by both athletes and coaches on two separate occasions. These questionnaires were completed by volleyball players, distance runners, and their respective coaches. The runners and running coaches were asked to answer the 'competition' section of the sport specific questionnaire based upon the runner's strongest or specialty race.

The athletes answered the sport specific and general questionnaires at the beginning of a practice because: (a) this was a time period in which the athletes were scheduled to do sport-related activity; and (b) it was assumed that they would be more attentive and willing to complete the questionnaires at the beginning of a practice than they would be at the end of a practice. The researcher was present during the administration of the questionnaires in order to answer questions and to ensure that athletes completed the questionnaires independently.

Prior to distributing the questionnaires, the researcher discussed issues such as confidentiality and the importance of honest and independent responding (see Appendix I). The researcher then asked the athletes to complete a sport specific questionnaire (see Appendix A) and a general questionnaire (see Appendix E). There was a different sport specific and general questionnaire for each sport and it took each athlete approximately 25 minutes to complete both.

First Completion of Questionnaires by Coaches. The researcher asked the coaching staff from each sport to complete similar sport specific (see Appendix C) and general (see Appendix F) questionnaires on five athletes that they coached. They were told to select athletes whom they were familiar with and who were also completing sport specific questionnaires. Therefore, a total of ten athletes (5 male and

5 female) at the high school level and ten athletes (5 male and 5 female) at the university level were evaluated by their coach in each sport. Each coach was required to complete a different set of questionnaires for each athlete, and it took each coach approximately 20 minutes to complete these questionnaires for one athlete. As all coaches had to complete multiple questionnaires, the researcher provided the coaches with the questionnaires, asked them to complete the questionnaires at home, and arranged to pick them up the following day.

Second Completion of Questionnaires by Athletes. Two weeks after the initial completion of the sport specific questionnaires, the researcher asked each athlete to complete a sport specific questionnaire (see Appendix B) for a second time and a modified general questionnaire (see Appendix J). With respect to the sport specific questionnaire, the athletes were required to answer each item on a 9-point Likert-type scale. The scale "is this something you need to improve on", was used for the athlete questionnaires to assess test-retest reliability, and "is this something this athlete needs to improve on" was used for the coach questionnaires to assess test-retest reliability. The modified general questionnaire, which was brief, was used to evaluate if there were any circumstances which occurred between the two administrations of the sport specific questionnaire which may have impacted the level of mental skills the athlete was utilizing.

The completion of these questionnaires took place at the practice site at the beginning of a practice, and the researcher was present during their completion. As well, the researcher emphasized the importance of honest and independent responding prior to distributing the questionnaires (see Appendix I). The completion of these questionnaires took approximately 10 minutes.

Second Completion of Questionnaires by Coaches. The researcher also asked

each coach to complete a second sport specific (see Appendix D) and a modified general questionnaire (see Appendix K) for five of the athletes whom they coached. These athletes were the same athletes on which the coaches completed the first sport specific questionnaire. Once again, the coaches were asked to complete the questionnaires at home and the researcher collected the questionnaires from the coach the following day. It took each coach approximately 10 minutes to complete a set of questionnaires on one athlete.

Results

As indicated, the athlete sport specific questionnaire included 4 columns. Each column was rated using a 9-point Likert-type scale where 1 = "definitely not", 5 = "sometimes or to some extent", and 9 = "definitely yes". Each column was rated for 20 game/race items, 17 practice items, and 5 items for immediately after the game/race (for a total of 42 items). Table 3 contains a summary of the descriptive statistics for each column of the volleyball player questionnaire (see Table 3), while table 4 contains the same information for runners (see Table 4). As well, the questionnaires in Appendices A and B contain the mean and standard deviation for each item of the sport specific questionnaire for volleyball players and runners (see Appendices A and B).

As indicated, the coach sport specific questionnaire included 5 columns. Each column was rated using a 9-point Likert-type scale where 1 = "definitely not", 5 = "sometimes or to some extent", and 9 = "definitely yes". Similar to the athlete questionnaire, each column was rated for 20 game/race items, 17 practice items, and 5 items for immediately after the game/race (for a total of 42 items). Table 5 contains a summary of the descriptive statistics for each column of the volleyball coach questionnaire (see Table 5), while Table 6 contains the same information for running

Table 3
Summary of Volleyball Player Questionnaire

For the question: "Is this something you need to improve on?"

	Competition	Immediately After	Practice	All Items
Mean (SD) for all items in this section	5.08 (1.61)	5.36 (1.85)	5.76 (1.56)	5.40 (1.54)
# of items with a mean of 7,8, or 9	0	0	0	0
# of items with a mean of 4, 5, or 6	All	All	All	All

For the question: "Is this item important for players?"

	Competition	Immediately After	Practice	All Items
Mean (SD) for all items in this section	8.21 (0.76)	8.11 (0.88)	8.0 (0.86)	8.11 (0.71)
# of items with a mean of 7,8, or 9	All	All	16/17	41/42

For the question: "Is this something that most players need to improve on?"

	Competition	Immediately After	Practice	All Items
Mean (SD) for all items in this section	6.31 (1.16)	6.38 (1.44)	6.55 (1.17)	6.41 (1.09)
# of items with a mean of 7,8, or 9	1/20	0	3/17	4/42
# of items with a mean of 4, 5, or 6	19/20	All	14/17	38/42

For the question: "If you need to improve, and if a sport psychologist was available, would you like some help?"

	Competition	Immediately After	Practice	All Items
Mean (SD) for all items in this section	3.76 (2.36)	3.63 (2.73)	3.58 (2.74)	3.67 (2.50)
# of items with a mean of 7,8, or 9	0	0	0	0
# of items with a mean of 4, 5, or 6	5/20	1/5	2/17	8/42

Table 4
Summary of Runner Questionnaire

For the question: "Is this something you need to improve on?"

	Competition	Immediately After	Practice	All Items
Mean (SD) for all items in this section	5.25 (1.61)	5.16 (2.16)	5.88 (1.82)	5.43 (1.73)
# of items with a mean of 7,8, or 9	0	0	0	0
# of items with a mean of 4, 5, or 6	19/20	All	All	41/42

For the question: "Is this item important for runners?"

	Competition	Immediately After	Practice	All Items
Mean (SD) for all items in this section	8.02 (0.86)	8.30 (0.77)	8.07 (0.95)	8.13 (0.77)
# of items with a mean of 7,8, or 9	All	All	All	All

For the question: "Is this something most runners need to improve on?"

	Competition	Immediately After	Practice	All Items
Mean (SD) for all items in this section	6.37 (1.21)	6.46 (1.49)	6.69 (1.38)	6.51 (1.24)
# of items with a mean of 7,8, or 9	4/20	0	2/17	6/42
# of items with a mean of 4, 5, or 6	16/20	All	15/17	36/42

For the question: "If you need to improve, and if a sport psychologist was available, would you like some help?"

	Competition	Immediately After	Practice	All Items
Mean (SD) for all items in this section	5.50 (2.18)	5.30 (2.45)	5.90 (2.44)	5.57 (2.23)
# of items with a mean of 7,8, or 9	0	0	0	0
# of items with a mean of 4, 5, or 6	19/20	All	All	41/42

Table 5
Summary of Volleyball Coach Questionnaire

For the question: "Is this something this athlete needs to improve on?"

	Competition	Immediately After	Practice	All Items
Mean (SD) for all items in this section	4.42 (1.77)	4.81 (1.56)	4.48 (1.38)	4.57 (1.57)
# of items with a mean of 7,8, or 9	0	0	0	0
# of items with a mean of 4, 5, or 6	15/20	All	13/17	33/42
Convergent validity correlation coefficient	-0.217	-0.163	0.066	0.231

For the question: "Is this item important for volleyball players?"

	Competition	Immediately After	Practice	All Items
Mean (SD) for all items in this section	7.45 (1.73)	7.70 (1.31)	7.46 (1.29)	7.54 (1.41)
# of items with a mean of 7,8, or 9	15/20	All	14/17	34/42
# of items with a mean of 4, 5, or 6	5/20	0	3/17	8/42

For the question: "Is this something this that most players need to improve on?"

	Competition	Immediately After	Practice	All Items
Mean (SD) for all items in this section	5.78 (1.52)	6.45 (1.36)	6.07 (1.20)	6.10 (1.32)
# of items with a mean of 7,8, or 9	0	0	2/17	2/42
# of items with a mean of 4, 5, or 6	All	All	15/17	40/42

Table 5 continued

For the question: "Do you think this athlete would benefit from working with a sport psychologist in this area?"

	Competition	Immediately After	Practice	All Items
Mean (SD) for all items in this section	5.01 (2.40)	5.12 (2.07)	4.42 (2.01)	4.85 (2.07)
# of items with a mean of 7,8, or 9	0	0	0	0
# of items with a mean of 4, 5, or 6	All	All	11/17	36/42

For the question: "Are you confident in your ability to answer this question?"

	Competition	Immediately After	Practice	All Items
Mean (SD) for all items in this section	8.38 (0.87)	8.42 (0.86)	8.33 (0.93)	8.38 (0.80)
# of items with a mean of 7,8, or 9	All	All	All	All

coaches (see Table 6). In addition, the questionnaires in Appendices C and D contain the mean and standard deviation for each item of the sport specific questionnaire for volleyball and running coaches (see Appendices C and D).

Test-retest reliability, face validity, and convergent validity was evaluated for the sport specific questionnaires for volleyball and running. Each of these areas will be discussed for volleyball players, volleyball coaches, runners, and running coaches respectively.

Volleyball Players

Test-retest reliability. As indicated, the test-retest reliability of the sport specific questionnaire for volleyball players was evaluated by administering the same questionnaire to the same athlete on two separate occasions (two weeks apart). Two steps were taken to help ensure that the athletes and coaches did not remember how they responded from one questionnaire completion to the other. First, the questionnaires were administered two weeks apart. Second, the first questionnaire required the athletes to answer each question for four separate columns (5 for coaches), whereas the second completion required them to answer the questions for only one column (2 for coaches).

In order to evaluate whether volleyball players remembered how they responded, they were asked two questions on the retest general questionnaire (see Appendices J and K): (a) "did you remember how you responded last time", and (b) "did how you responded last time influence how you responded this time". All questions were answered on a 9-point, Likert-type scale where 1 = "no, not at all", 5 = "somewhat", and 9 = "definitely yes, a lot". The mean response to the first question was 4.13 (sd = 2.3), and the mean response to the second question was 3.57 (sd = 2.49). According to the volleyball players, they had a mean of 1.55 (sd = 0.82) games

Table 6
Summary of Running Coach Questionnaire

For the question: "Is this something this athlete needs to improve on?"

	Competition	Immediately After	Practice	All Items
Mean (SD) for all items in this section	3.48 (1.30)	3.20 (1.19)	3.98 (1.62)	3.55 (1.37)
# of items with a mean of 7,8, or 9	0	0	0	0
# of items with a mean of 4, 5, or 6	4/20	0	11/17	15/42
Convergent validity correlation coefficient	-0.092	-0.318	0.021	-0.151

For the question: "Is this item important for runners?"

	Competition	Immediately After	Practice	All Items
Mean (SD) for all items in this section	6.83 (2.39)	6.27 (3.74)	7.49 (1.61)	6.86 (2.58)
# of items with a mean of 7,8, or 9	9/20	0	14/17	23/42
# of items with a mean of 4, 5, or 6	11/20	All	3/17	19/42

For the question: "Is this something this that most runners need to improve on?"

	Competition	Immediately After	Practice	All Items
Mean (SD) for all items in this section	5.50 (1.63)	5.20 (2.77)	6.57 (0.51)	5.76 (1.62)
# of items with a mean of 7,8, or 9	2/20	0	7/17	9/42
# of items with a mean of 4, 5, or 6	17/20	All	10/17	32/42

Table 6 continued

For the question: "Do you think this athlete would benefit from working with a sport psychologist in this area?"

	Competition	Immediately After	Practice	All Items
Mean (SD) for all items in this section	3.47 (0.94)	3.19 (1.05)	4.03 (1.36)	3.56 (0.96)
# of items with a mean of 7,8, or 9	0	0	0	0
# of items with a mean of 4, 5, or 6	5/20	1/5	11/17	17/42

For the question: "Are you confident in your ability to answer this question?"

	Competition	Immediately After	Practice	All Items
Mean (SD) for all items in this section	6.86 (2.08)	7.18 (2.27)	6.85 (2.07)	6.97 (2.12)
# of items with a mean of 7,8, or 9	9/20	All	8/17	22/42
# of items with a mean of 4, 5, or 6	11/20	0	9/17	20/42

and 6.38 (sd = 3.23) practices between questionnaire completions. As well, 21.9% of the volleyball players indicated that they were injured between questionnaire completions and 34.4% said that they had a troublesome experience such as the death of a loved one.

Their responses from the column "is this something that you need to improve on" were used to calculate test-retest reliability. The Pearson Product Moment Correlation Coefficient was used to determine if volleyball players responded consistently (i.e., the same) on both administrations of the sport specific questionnaire. As well, the items which volleyball players indicated they needed help (i.e., a rating of "7", "8", or "9") on both the first and second administration of the sport specific questionnaire were examined to determine if volleyball player ratings were consistent across these items (see Appendix M).

The overall correlation coefficient for game items was 0.839, for practice items 0.743, for immediately after game items 0.568, and for all items 0.781. Appendix N contains a summary of the correlation coefficients for the test-retest reliability of individual items (see Appendix N). With respect to individual items, the correlation coefficients ranged from 0.221 to 0.764 (1-tailed). Game item 8 (blocking out distractors that don't involve volleyball) was not significantly correlated at either the 0.05 or 0.01 levels. Immediately after game item 1 (evaluating your mental preparation and playing performance for that game), and practice items 2 (keeping a written record of progress in meeting your goals) and 10 (working more on skill deficiencies) were significantly correlated at the 0.05 level. All other items were significant at the 0.01 level.

The overall correlation coefficient for university volleyball players for game items was 0.880, for practice items was 0.781, for immediately after game items was

0.820, and for all items was 0.894. With respect to individual items, the correlation coefficients ranged from 0.247 to 0.861 (1-tailed, see Appendix N). Game item 8 (blocking out distractors that don't involve volleyball) and immediately after the game item 1 (evaluating your mental preparation and playing performance for that game) were not significantly correlated at either the 0.05 or 0.01 level. Game items 13 (being assertive when the opportunity presents itself) and 19 (communicating your precompetition needs to others), immediately after game item 4 (communicating with your coach), and practice items 8 (remaining positive when an injury forces you to stop training) and 17 (using mental imagery, self-talk, and key words before and during games simulations) were significantly correlated at the 0.05 level, and all other items were significantly correlated at the 0.01 level.

The overall correlation coefficient for high school volleyball players for game items was 0.843, for practice items 0.596, for immediately after game items 0.248, and for all items 0.630. With respect to individual items, the correlation coefficients ranged from 0.097 to 0.807 (1-tailed, see Appendix N). Eleven of the 42 items were significant at the 0.05 level (1-tailed), and 10/42 items were significant at the 0.01 level.

As indicated, the items in which volleyball players indicated they needed help (i.e., a rating of "7", "8", or "9" on the sport specific questionnaire) were also examined (see Appendix M). Overall, the volleyball players responded somewhat inconsistently across questionnaire completions. As can be seen by examining each individual athlete's responses, some volleyball players indicated they needed help with several items on the first administration of the sport specific questionnaire and fewer or no items on the second administration, and vice versa. As well, some athletes indicated they needed help with different items on each administration of the questionnaire, whereas other athletes responded more consistently.

Face validity. Face validity asks whether the items on a questionnaire appear to evaluate what they were intended to assess (Allen & Yen, 1979). The face validity of the sport specific questionnaire for volleyball players was evaluated by examining the volleyball player's responses to three questions.

First, whether or not the items were important for volleyball players in general was assessed by calculating the mean and standard deviation for each item in the column "is this item important for volleyball players". The mean for each item on the volleyball questionnaire ranged from 5.89 to 8.69, with 28/42 items having a mean response greater than 8, and all but one item having a mean response greater than 7 (see Appendix A). Therefore, on average, athletes felt that all items on this questionnaire were important for their sport.

Second, whether or not each item was identified as needing improvement by at least some volleyball players was examined by looking at the range of responses to the column "is this something you need to improve on" on the volleyball player questionnaire. All items on the volleyball questionnaire had mean responses of 4 or greater indicating that, on average, athlete's needed at least some help for all items (see Table 3). As well, the maximum response for all 42 items to this column on the volleyball player questionnaire was 9. That is, at least one volleyball player indicated that they definitely needed help for each of the items.

Third, the mean and standard deviation of the items from the column "is this something that most volleyball players need to improve on" was examined to identify whether or not volleyball players felt this was an area in which most athletes in their sport needed to improve. With respect to this column, the mean for each item on the volleyball player questionnaire ranged from 5.31 to 7.22 (see Appendix A). All items on the questionnaire had mean responses of 4 or greater indicating that, on average,

volleyball player's felt that most athletes in their sport needed to improve at least somewhat for each item on the sport specific questionnaire.

Do volleyball players want help from a sport psychologist? The mean and standard deviation of the items from the column "if you need to improve, and if a sport psychologist was available, would you like some help" on the volleyball player questionnaire was examined to identify whether or not athletes felt that they could benefit from working with a sport psychology consultant.

With respect to this column, the mean for each item on the volleyball player questionnaire ranged from 2.53 to 4.72 (see Appendix A). The mean rating for all game items was 3.76 (sd = 2.36), for all practice items 3.58 (sd = 2.74), for all immediately after game items 3.63 (sd = 2.73), and for all items on the sport specific questionnaire 3.67 (sd = 2.50). Only eight out of the 42 items had a mean response greater than 4, but all items had a maximum score of 9. Therefore, on average, volleyball players indicated they wanted minimal help from a sport psychologist with most items on the sport specific questionnaire, but at least one athlete wanted help for each item.

Convergent validity. The convergent validity of the sport specific questionnaire for volleyball was evaluated by correlating the coaches and athletes responses to all items in the column "is this something that you/this athlete need(s) to improve on". The Pearson Product Moment Correlation Coefficient was used to evaluate convergent validity for the sport specific questionnaire for volleyball players. Appendix L contains a summary of the correlation coefficients for each item (see Appendix L). The correlation coefficients ranged from -0.455 to 0.636 (1-tailed). The overall coefficient for game items was -0.217, for practice items 0.066, for immediately after game items -0.163, and for all items 0.231. Competition items 19 (communicating your

precompetition needs to others) and 18 (preparing and following a detailed precompetition and competition plan) were significantly negatively correlated at the .05 level. Whereas, competition item 7 (blocking out what people might say if you lose or don't perform well) was significantly positively correlated at the .05 level, and practice item 10 (working more on skill deficiencies) was significantly positively correlated at the .01 level. No other items were significantly correlated.

Volleyball Coaches

Test-retest reliability. In order to evaluate whether volleyball coaches remembered how they responded, they were asked two questions on the retest general questionnaire (see Appendices J and K): (a) "did you remember how you responded last time", and (b) "did how you responded last time influence how you responded this time". All questions were answered on a 9-point, Likert-type scale where 1 = "no, not at all", 5 = "somewhat", and 9 = "definitely yes, a lot". The mean response to the first question was 2.94 (sd = 2.1), and the mean response to the second question was 2.15 (sd = 0.9).

The overall correlation coefficient for game items was 0.913, for practice items was 0.770, for immediately after game items 0.804, and for all items 0.882. With respect to individual items, the correlation coefficients ranged from 0.149 to 0.913 (1-tailed, see Appendix O). Game items number 2 (tuning out negative thoughts) and 18 (preparing and following a detailed precompetition and competition plan), immediately after game item number 1 (evaluating your mental preparation and playing performance for that game), and practice items number 2 (keeping a written record of progress in meeting your goals), 4 (maintaining your concentration, especially when practice gets long, repetitive, or uninteresting), and 11 (practicing mental skills as well as physical skills) were not significantly correlated. All other items were significantly

correlated at either the .05 or .01 level.

Face validity. The face validity of the sport specific questionnaire for volleyball coaches was evaluated by examining the coach responses to three questions. First, whether or not coaches felt each of the items were important for volleyball players in general was assessed by calculating the mean and standard deviation for each item in the column "is this item important for volleyball players". The mean for each item on the coach questionnaire ranged from 6.0 to 8.75, with all items having a mean response greater than 6 (see Appendix A). Therefore, on average, coaches felt that all items on this questionnaire were somewhat or definitely important for the athletes in their sport.

Second, whether or not each item was identified as needing improvement by at least some volleyball coaches was examined by looking at the range of responses to the column "is this something that this athlete needs to improve on" on the volleyball coach questionnaire. Thirty-three of the forty-two items on this questionnaire had mean responses greater than 4 indicating that, on average, volleyball coaches felt that players needed at least some help for most items (see Table 4). As well, the maximum response for each item on the coach questionnaire ranged from 7 to 9, indicating that volleyball coaches felt that at least one athlete needed help with each item on the sport specific questionnaire.

Third, the mean and standard deviation of the items from the column "is this something that most volleyball players need to improve on" was examined to identify whether or not volleyball coaches felt this was an area in which most athletes in their sport needed to improve. The mean for each item on the volleyball coach questionnaire ranged from 4.25 to 7.25, with all but 2 items having a mean greater than 5. Therefore, on average, volleyball coaches felt that most athletes need to

improve "to some extent" on each item.

Do volleyball coaches feel their athletes would benefit from working with a sport psychologist? The mean and standard deviation of the items from the column "do you think this athlete would benefit from working with a sport psychologist in this area" on the coach questionnaire was examined to identify whether or not volleyball coaches felt that volleyball player's could benefit from working with a sport psychology consultant. The mean for each item on the coach questionnaire ranged from 3.50 to 5.78 (see Appendix C). The mean rating for all game items was 5.01, for all practice items 4.42, for all immediately after game items 5.12, and for all items on the sport specific questionnaire 4.85. The coach mean ratings were greater than four for 36 of the 42 items, and all items had a maximum score of 9. This suggests that, on average, coaches felt that their athletes could benefit (at least somewhat) by working with a sport psychologist in most areas identified on the sport specific questionnaire, and that at least one volleyball player needed help with each item. Interestingly, the number of coach items with mean ratings greater than four (i.e., 36) far exceeds the number of player items (i.e., 8).

Are volleyball coaches confident in their ability to evaluate volleyball players mental skill strengths and weaknesses? The volleyball coaches mean responses from the column "are you confident in your ability to answer this question" were examined to determine whether or not volleyball coaches were confident in their ability to evaluate a volleyball player's mental skill strengths and weaknesses.

The mean for each item on the coach questionnaire ranged from 6.72 to 9.00 (see Appendix C), with all but 1 response having a mean greater than 7. Therefore, on average, volleyball coaches were very confident in their ability to evaluate the mental skill strengths and weaknesses of the volleyball player's whom they coached.

Runners

Test-retest reliability. In order to evaluate whether runners remembered how they responded, they were asked two questions on the retest general questionnaire (see Appendices J and K): (a) "did you remember how you responded last time", and (b) "did how you responded last time influence how you responded this time". All questions were answered on a 9-point, Likert-type scale where 1 = "no, not at all", 5 = "somewhat", and 9 = "definitely yes, a lot". The mean response to the first question was 4.1 (sd = 2.45), and the mean response to the second question was 3.65 (sd = 2.41). According to the runners, they had a mean of 0.317 (sd = 0.57) races and 7.89 (sd = 4.86) practices between questionnaire completions. As well, 26.2% of the runners indicated that they were injured between questionnaire completions and 23.8% said that they had a troublesome experience such as the death of a loved one.

Their responses from the column "is this something that you need to improve on" were used to calculate test-retest reliability. The Pearson Product Moment Correlation Coefficient was used to determine if runners responded consistently (i.e., the same) on both administrations of the sport specific questionnaire. As well, the items which runners indicated they needed help in (i.e., a rating of "7", "8", or "9") on both the first and second administration of the sport specific questionnaire were examined to determine if runner ratings were consistent across these items (see Appendix M).

The overall correlation coefficient for runners for game items was 0.492, for practice items 0.530, for immediately after game items 0.615, and for all items 0.593. With respect to individual items, the correlation coefficients ranged from 0.169 to 0.617 (1-tailed, see Appendix N). Game items 5 (maintaining your concentration on the task at hand) and 6 (blocking out distractors over which you have no control), and practice

item 9 (improving your consistency and fine tuning the skills you can already perform, rather than just going through the motions) were not significantly correlated at either the 0.05 or 0.01 levels. All other items were significantly correlated at either the 0.05 or 0.01 levels. Notably, the test-retest reliability for runners was lower than the test-retest reliability for volleyball players.

The overall correlation coefficient for university runners for game items was 0.528, for practice items 0.669, for immediately after game items 0.615, and for all items 0.665. With respect to individual items, the correlation coefficients ranged from -0.007 to 0.827 (1-tailed, see Appendix N). Thirty of the 42 items were significantly correlated at either the 0.05 or 0.01 significance levels.

The overall correlation coefficient for highschool runners for game items was 0.627, for practice items 0.292, for immediately after game items 0.689, and for all items 0.608. With respect to individual items, the correlation coefficients ranged from -0.176 to 0.909 (1-tailed, see Appendix N). Eighteen of the 42 items were significantly correlated at either the 0.05 or 0.01 significance levels.

As indicated, the items in which runners indicated they needed help (i.e., a rating of "7", "8", or "9" on the sport specific questionnaire) were also examined (see Appendix M). Overall, the runners responded somewhat inconsistently across questionnaire completions. As can be seen by examining each individual athlete's responses, some runners indicated they needed help with several items on the first administration of the sport specific questionnaire and fewer or no items on the second administration, and vice versa. As well, some runners indicated they needed help with different items on each administration of the questionnaire, whereas other runners responded more consistently.

Face validity. The face validity of the sport specific questionnaires for runners

was evaluated by examining the runner's responses to three questions. First, whether or not the items were important for runners in general was assessed by calculating the mean and standard deviation for each item in the column "is this item important for runners". The mean for each item on the runner questionnaire ranged from 7.05 to 8.57, with 30/42 items having a mean response greater than 8, and all items having a mean response greater than 7 (see Appendix A). Therefore, on average, athletes felt that all items on this questionnaire were important for their sport.

Second, whether or not each item was identified as needing improvement by at least some runners was examined by looking at the range of responses to the column "is this something you need to improve on". Forty-one of the 42 items on the runner questionnaire had mean responses of 4 or greater indicating that, on average, athlete's needed at least some help for all items (see Table 5). In addition, the maximum response for all 42 items to this column on the runner questionnaire was 9. That is, at least one runner indicated that they definitely needed help for each of the items.

Third, the mean and standard deviation of the items from the column "is this something that most runners need to improve on" was examined to identify whether or not most athletes felt this was an area in which most runners needed to improve. The mean for each item on the runner questionnaire ranged from 4.95 to 7.60 (see Appendix A). All items on the questionnaire had mean responses of 4 or greater indicating that, on average, athlete's felt that most athletes in their sport needed to improve at least somewhat for each item on the sport specific questionnaire.

Do runners want help from a sport psychologist? The mean and standard deviation of the items from the column "if you need to improve, and if a sport psychologist was available, would you like some help" on the runner questionnaire

was examined to identify whether or not athletes felt that they could benefit from working with a sport psychology consultant. The mean for each item on the runner questionnaire ranged from 4.28 to 6.58 (see Appendix A). The mean rating for all game items was 5.50 (sd = 2.18), for all practice items 5.90 (sd = 2.44), for all immediately after game items 5.30 (sd = 2.45), and for all items on the sport specific questionnaire 5.57 (sd = 2.23). All items had a maximum rating of 9, indicating that at least one runner wanted help with each item on the sport specific questionnaire.

Interestingly, all but 1 item had a mean rating greater than 4 on the runner questionnaire, whereas only 8 of 42 items had a mean rating greater than 4 on the volleyball player questionnaire. Therefore, on average, the runners indicated that they would like more help from a sport psychologist (across most items) than did the volleyball players.

Convergent Validity. As indicated, the convergent validity of the sport specific questionnaire for runners was evaluated by correlating the coaches and athletes responses to all items in the column "is this something that you/this athlete need(s) to improve on". The Pearson Product Moment Correlation Coefficient was used to evaluate convergent validity for the sport specific questionnaire for runners. Appendix L contains a summary of the correlation coefficients for each item (see Appendix L). The correlation coefficients ranged from -0.405 to 0.611 (1-tailed). The overall coefficient for game items was -0.092, for practice items 0.021, for immediately after game items -0.318, and for all items -0.151. Practice item 7 (staying positive when you're having a bad practice) was significantly negatively correlated at the .05 level, whereas practice item 2 (keeping a written record of progress in meeting your goals) was significantly positively correlated at the .01 level. No other items were significantly correlated.

Running Coaches

Test-retest reliability. In order to evaluate whether running coaches remembered how they responded, they were asked two questions on the retest general questionnaire (see Appendices J and K): (a) "did you remember how you responded last time", and (b) "did how you responded last time influence how you responded this time". All questions were answered on a 9-point, Likert-type scale where 1 = "no, not at all", 5 = "somewhat", and 9 = "definitely yes, a lot". The mean response to the first question was 2.0 (sd = 1.05), and the mean response to the second question was 2.0 (sd = 1.05).

The overall correlation coefficient for game items was 0.453, for practice items 0.514, for immediately after game items 0.107, and for all items 0.411. With respect to individual items, the correlation coefficients ranged from -0.357 to 0.908 (1-tailed, see Appendix O). Seven game items (i.e., number 18, 16, 14, 12, 7, 5, and 1) and 1 practice item (i.e., number 12) were significant at the .05 level, while two game items (i.e., number 17, 15) and four practice items (i.e., number 3, 4, 5, and 6) were significant at the .01 level. No other items were significantly correlated. Notably, the test-retest reliability for running coaches was lower than the test-retest reliability for volleyball coaches.

Face validity. The face validity of the sport specific questionnaire for running coaches was evaluated by examining the coach responses to three questions. First, whether or not coaches felt each of the items were important for runners in general was assessed by calculating the mean and standard deviation for each item in the column "is this item important for runners". The mean for each item on the coach questionnaire ranged from 5.33 to 8.67, with all items having a mean response greater than 6 (see Appendix A). Therefore, on average, coaches felt that all items on this

questionnaire were somewhat or definitely important for the athletes in their sport.

Second, whether or not each item was identified as needing improvement by at least some running coaches was examined by looking at the range of responses to the column "is this something that this athlete needs to improve on" on the running coach questionnaire. Only fifteen of the forty-two items on this questionnaire had mean responses greater than 4 indicating that, on average, running coaches felt that runners needed at least some help for few items (see Table 4). In contrast, the maximum response for each item on the coach questionnaire ranged from 5 to 8, indicating that running coaches felt that at least one athlete needed some help with each item on the sport specific questionnaire.

Third, the mean and standard deviation of the items from the column "is this something that most runners need to improve on" was examined to identify whether or not running coaches felt this was an area in which most athletes in their sport needed to improve. The mean for each item on the running coach questionnaire ranged from 3.33 to 8.33, with all but one item having a mean greater than 4. Therefore, on average, running coaches felt that most athletes need to improve "to some extent" on each item.

Do running coaches feel their athletes would benefit from working with a sport psychologist? The mean and standard deviation of the items from the column "do you think this athlete would benefit from working with a sport psychologist in this area" on the coach questionnaire was examined to identify whether or not running coaches felt that runner's could benefit from working with a sport psychology consultant. The mean for each item on the coach questionnaire ranged from 2.25 to 4.80 (see Appendix C). The mean rating for all game items was 3.47, for all practice items 4.03, for all immediately after game items 3.19, and for all items on the sport specific questionnaire

3.56. Only 17 of the 42 items on the running coach questionnaire had mean ratings greater than 4. Interestingly, this is far fewer items than that of the runners (41 of 42 items with mean ratings greater than 4) or the volleyball coaches (36 of 42 items with mean ratings greater than 4). Thirty of the 42 items had maximum scores of 7 or higher, indicating that running coaches felt that at least one athlete could definitely benefit from working with a sport psychologist on only 30 of the 42 items on the sport specific questionnaire.

Are running coaches confident in their ability to evaluate runners mental skill strengths and weaknesses? The running coaches mean responses from the column "are you confident in your ability to answer this question" were examined to determine whether or not running coaches were confident in their ability to evaluate a runner's mental skill strengths and weaknesses.

The mean for each item on the coach questionnaire ranged from 5.95 to 7.20 (see Appendix C), with all but one response having a mean greater than 6. Therefore, on average, running coaches were very fairly confident in their ability to evaluate the mental skill strengths and weaknesses of the runner's whom they coached. Interestingly, although the running coaches were fairly confident, the volleyball coaches were somewhat more confident in their ability to evaluate mental skill strengths and weaknesses of the athlete's whom they coach (i.e., mean scores ranging from 6.72 to 9.0).

Open-ended Comments for the Volleyball and Running Sport Specific Questionnaires

An open ended question was included after each section (i.e., game/race, immediately after game/race, and practice) of the sport specific questionnaire. This question asked athletes and coaches to indicate any additional concerns that they had which were not addressed on the questionnaire. Most of the comments were

additional examples which could be added to existing questions. A few comments, however, suggest the need to modify existing questions or to add new items.

With respect to races, two items were recommended for the running questionnaire. The first was an item on race tactics. Some open ended comments concerning this item were "that I won't keep my pace and will fall behind 100m into the race", and "I have to be careful to stay behind in the beginning so I can use my strength, the kick at the end". This item could be incorporated into the precompetition item of the questionnaire (i.e., game number 18), but perhaps examples need to be added to help clarify the question. The second recommended item involved focusing on yourself, and not comparing yourself to others. Some comments concerning this item were "thinking about just me, how I'm going to feel, how I'm going to run, not can I beat her", and "I often compare myself to others". Once again, this item could be incorporated into an existing item (i.e., game number 2 or 6), but the examples may need to be modified to reflect this sport specific concern.

With respect to games, some volleyball players suggested the need to include specific examples. One player indicated the importance of "mental and physical readiness when being subbed in and out of matches", whereas another stated that "the faster you pick up on a hitter's tendencies, the more efficient you will be during the game". In addition, one athlete suggested changing an existing example. According to the athlete, "saying 'I'm going to kill this one' isn't the best philosophy".

With respect to practices, one runner emphasized the importance of time management, especially with respect to "balancing school and training". As well, one runner emphasized the need for balance in training "accepting that you get peaks and valleys in performances and you can't train at a high intensity year round. Rest is rest". Last, a swim coach hinted at the importance of managing troublesome emotions at

practices with their comment "this swimmer is sometimes moody and that impacts practice".

Discussion

Face Validity

All measures suggest that the sport specific questionnaires for runners and volleyball players are face valid. All of the items were rated as important by both coaches and athletes. Each item was identified as needing improvement by at least some runners and volleyball players, and athletes and coaches felt that most athletes needed to improve "to some extent" on each item. In addition, the standard deviation was small when the athletes were asked to evaluate how important each item was for their sport. The results suggest that most athletes rated each item as important. In contrast, the standard deviation was larger when the athletes were asked to evaluate whether they needed to improve in specific areas of mental preparation. The results suggest that the sport specific questionnaires would have a good chance of discriminating between those athletes who did and did not want help in specific areas.

Notably, the athletes ratings for each of the columns were higher than the coaches ratings. This could have important implications for a service provider. That is, the coaches may underestimate the amount of help with mental preparation that an athlete desires, as well as the importance of mental skill training for their sport. As the success of a mental skills training program frequently depends on the cooperation of coaches, this finding highlights the need to discuss the benefits of a sport psychology program with the coach prior to program implementation.

Convergent Validity

There was little agreement between athletes and coaches on the areas of mental preparation in which an athlete needed help. Only one item was significantly

positively correlated for either the volleyball or running questionnaire. Furthermore, there were some items which were significantly negatively correlated for each of these sports. Interestingly, the coaches were very confident in their ability to rate the athlete's mental skill strengths and weaknesses (as measured by their answers to the "confidence" column of the sport specific questionnaire). Furthermore, there was no difference in the coaches confidence level for internal or external behaviors.

The lack of agreement between coach and athlete emphasizes the need to obtain multiple ratings of mental skill strengths and weaknesses when developing a mental skills training program. It also suggests the need to operationalize the constructs so that both coach and athlete are rating the same behaviors.

Test-Retest Reliability

In general, test-retest reliability ratings of 0.65 are considered low, 0.75 are considered moderate, and anything above 0.90 is considered high (Murphy & Davidshofer, 1998). In addition, rating scales and preliminary screening instruments should have test-retest reliability ratings of at least 0.70 (Murphy & Davidshofer, 1998). Using this criterion, the test-retest reliability in this study ranged from low to moderate for most items. The test-retest reliability was higher for university than high school athletes, and for volleyball (players and coaches) than running (players and coaches). With respect to the former, university athletes may be more familiar with the concepts or with their own behavior.

There are several possible reasons for lower than expected reliability. First, the athlete's behavior may have changed as a result of self-monitoring. Second, the athlete's may have become more self-aware as a result of the initial questionnaire completion. Third, the readability of the questionnaire, especially for younger participants, may have been low. Fourth, the athletes' may not have been familiar with

the constructs. Fifth, the athletes' responses may have been influenced by a recent practice or competition. That is, if they had a poor practice, they may have responded more negatively to the items.

In order to help improve the reliability of these questionnaires the following steps could be taken. First, the athletes' could be asked to monitor their behavior for several games/practices prior to initial questionnaire completion. Second, the readability of each questionnaire could be assessed and modified so that it is readable for all participants. Third, the athletes' could be provided with operational definitions of the various constructs and their resultant familiarity with the constructs could be examined. Fourth, each item could include a prompt to ask the athlete to reflect upon past practices/competitions rather than just the previous one. Finally, the low reliability which was found for some items emphasizes the importance of using multiple measures of behavior (i.e., an interview in addition to a questionnaire) on several separate occasions (i.e., after various games/practices).

Do Athletes and Coaches Feel Athletes Would Benefit from Working With a Sport Psychologist

Only eight items on the volleyball player questionnaire had mean ratings greater than four for the column "if you need to improve and if a sport psychologist were available, would you like some help". In contrast, volleyball players rated all items greater than four when asked "is this something you need to improve on". Therefore, the volleyball players' average ratings for the "sport psychologist" column to the sport specific questionnaire were much lower than their "improvement" ratings. These results suggest that, although volleyball players want to improve in certain areas, they are reluctant to ask a sport psychologist for help. There are several possible explanations for this finding. The volleyball players may be unfamiliar with

mental skills training. They may feel that a psychologist only works with athletes who are performing poorly. The volleyball players may be unaware of the need to practice mental skills regularly and that these are abilities which can be developed. This finding points out the importance of educating some athletes on the role of mental skills training in their overall development as an athlete.

Although there was discrepancy between volleyball players' responses to the columns "improve" and "sport psychologist", there was no discrepancy for runners. On the runner questionnaire, 41 of the 42 items had mean ratings greater than four for both the "improve" and "sport psychologist" columns. These results suggest that the runners were more open to receiving help from a sport psychology consultant. Although some differences were found between sports in responses to this column, more research is necessary to determine if this is a sport-related phenomena, or if it was just a function of the specific athletes who participated in this study.

Thirty-six of the 42 items on the volleyball coach questionnaire had mean ratings greater than 4 for the column "if this athlete needs to improve, and if a sport psychologist were available do you think this athlete would benefit from working with a sport psychologist". Only seventeen of the 42 items had mean ratings greater than 4 on the running coach questionnaire. Interestingly, these findings are the opposite of the athlete ratings (in which runners were much more open to working with a sport psychology consultant than were the volleyball players). These discrepant findings suggest that both questions (i.e., "improve" and "sport psychologist") should be asked when evaluating the mental skill strengths and weaknesses of athletes. It should not be assumed that just because an athlete (or coach) feels they need to improve in an area, that they desire help from a sport psychologist. Furthermore, if there is a discrepancy between these two columns (i.e., "improve" and "sport psychologist"), the

reasons for it should be explored with the coach or athlete prior to service provision.

Are Coaches Confident in Their Ability to Evaluate the Mental Skill Strengths and Weaknesses of the Athletes Whom They Coach

Both volleyball and running coaches were confident in their ability to evaluate the mental skill strengths and weaknesses of the athletes whom they coached. Notably, the volleyball coaches were somewhat more confident in their ability than were the running coaches. Once again, this may not be related to these specific sports, but rather the coaches who were participants in this research. More research is necessary to determine if this is a sport-related phenomena. Interestingly, although the volleyball coaches were more confident in their ability to evaluate the mental skill strengths and weaknesses of the athletes whom they coached, there was no more agreement between coach and athlete ratings on the sport specific questionnaire for volleyball than there was for running.

Study Two

The second study included a more detailed analysis of the predictive validity of the sport specific questionnaires with a small number of athletes and coaches. The participants were basketball players and swimmers that had been shown previously to have high test-retest reliability and high face validity (Lines et al., in press). In order to evaluate predictive validity, athletes from each of basketball and swimming first completed the sport specific questionnaire for their respective sport. Then, to determine if those assessments predicted their mental skill strengths or deficits at practices or competitions, they were asked to complete another questionnaire immediately after three games/races and three practices. Their coaches were also asked to complete similar questionnaires on each of these occasions.

Method

Participants

The participants in this study included six (3 male and 3 female) swimmers and ten (3 male and 7 female) basketball players. The athletes were members of a local university team and varied in age from 18 to 22 years. The participants had competed at this level in their respective sports for a mean of 2.3 years (range from 1 to 5), and spent a mean of 15.9 hours per week (range from 8 to 25) in sport-related activities (including practice time and additional training such as weights). The basketball players who were selected to participate in this study received at least 15 minutes of playing time per game. Both the swimmers and basketball players volunteered to participate.

In addition to the athletes, their coaches were asked to participate in various parts of this study. One female swimming coach and three (2 male and 1 female) basketball coaches participated. These coaches had coached at their current level for a mean of 1.8 years (range from 1.5 to 2 years), and spent an average of 28.3 hours (range from 20 to 35 hours) per week on coach-related activities.

Procedure

Participant Recruitment. Prior to the study, the researcher solicited participation by phoning the coaches and describing the purpose of the study, requirements of participants, and the benefits of participation. At this time, the researcher scheduled an initial meeting with each of the coaches. During the initial meeting, the researcher further elaborated upon the procedure, and emphasized areas which are important to ensure treatment integrity (see Appendix G). The researcher also provided the coach with necessary sample questionnaires, gave the coach athlete consent forms (see Appendix H), and confirmed the dates during which data would be collected. The coach was required to administer and collect consent forms from the athletes prior to

the beginning of data collection. There was one consent form for participants over the age of 18 and one for participants under the age of 18.

Completion of Sport Specific and General Questionnaires by Athletes and Coaches. The athletes and their coaches first completed both a sport specific (see Appendices A and C) and a general (see Appendices E and F) questionnaire. The sport specific questionnaires in the second study (i.e., for basketball and swimming) asked the athlete and coach to evaluate each item on a 9-point Likert-type scale. The scale, "is this something you need to improve on", was used for the athlete questionnaires, and "is this something this athlete needs to improve on" was used for the coach questionnaires. In addition, the coaches were asked to indicate how confident they were in their responses to each item on the sport specific questionnaire (see Appendix C). The sport specific questionnaires in this study took each athlete and coach approximately 15 minutes to complete. The same general questionnaires were used for athletes and coaches in this study as were used in the first study. It took each athlete and coach approximately 10 and 5 minutes respectively to complete this questionnaire. The procedure from the first study was used during the completion of these questionnaires (see the section 'First Completion of Questionnaires by Athletes' in Study One).

Description of the Questionnaires Used to Evaluate Predictive Validity for Practices and Games/Races. With respect to practice behaviors, there were two separate questionnaires for each of basketball and swimming, one for coaches and one for athletes (see Appendix P). The practice questionnaires asked the coaches and athletes, immediately after a practice, to evaluate the mental skill strengths and weaknesses of the athlete during that particular practice. Specifically, it asked them to evaluate the athlete's use of mental skills before practice, while warming up, and

during the first and second halves of practice. The items on the questionnaire used to assess predictive validity for practice were designed to evaluate specific items on the sport specific questionnaire (see Table 7). For example (as outlined in Table 7), the question "when practicing skills you always practice, did you try to do the skills accurately and precisely" was used to evaluate the predictive validity of practice item 9 ("improving your consistency and fine tuning the skills you can already perform, rather than just going through the motions") on the sport specific questionnaire for basketball players. Appendix R contains a list of the questions on these "practice" questionnaires that were used to evaluate the predictive validity of the items on the sport specific questionnaires (see Appendix R). A questionnaire used to evaluate a practice took each athlete and coach approximately 10 minutes to complete.

As stated, this study also involved the completion of questionnaires to evaluate mental skill strengths and weaknesses immediately after three consecutive games/races. There were two different game questionnaires for each of basketball and swimming, one for coaches and one for athletes (see Appendix Q). Immediately after games, the questionnaire for basketball coaches (see Appendix Q) asked the coach to evaluate the basketball player's utilization of mental skills during the last two hours before the game, during warmup, during the first half, during halftime, and during the second half. Immediately after races, the questionnaire for swimming coaches (see Appendix Q) asked the coach to evaluate the swimmer's utilization of mental skills during the last two hours before the race, during warmup, and during the beginning, middle and end of the race. In addition to the sections contained on the respective coach questionnaires, the questionnaire for basketball players and swimmers (see Appendix Q) asked the athlete to evaluate their mental preparation the night before, and during the day of the game/race. The athlete questionnaire was

completed in approximately 20 minutes, and the questionnaire for coaches was completed in approximately 15 minutes. The items on the game/race questionnaire were designed to evaluate the predictive validity of specific items on the sport specific questionnaire (see Table 7). For example (as outlined in Table 7), the question "did you think of what you would like to accomplish during the game..." was used to evaluate the predictive validity of game item 16 ("setting challenging, yet attainable goals for each game") on the sport specific questionnaire for basketball players. Appendix R contains a list of the questions on the predictive validity questionnaires that were used to evaluate the items on the sport specific questionnaires (see Appendix R).

Completion of Questionnaires by Athletes and Coaches Immediately after Practices and Games/Races. After the completion of the sport specific questionnaires, both the athletes and their coaches answered a questionnaire immediately after three practices (see Appendix P) and three games/races (see Appendix Q) in order to obtain three, separate samples of behavior for both practices and competitions. The questionnaires were administered at practices and games/races which occurred right after the practice in which the sport specific questionnaire was completed in order to sample instances of behavior as close as possible to the completion of the sport specific questionnaire. The scheduling of the completion of the questionnaires is shown in Table 8 (see Table 8). With respect to race questionnaires, the swimmers completed one questionnaire per day during a three-day swimming meet, and they were asked to complete this questionnaire after their most important heat if they did not make the final, and after the final of their specialty stroke if they qualified.

Prior to the completion of the first questionnaire, the researcher met with the participants (both athletes and coaches) to explain the importance of honest

Table 7

Sample of questions which were used to evaluate predictive validity of the sport specific questionnaire for basketball players

Item on Sport Specific Questionnaire	Questions used to evaluate predictive validity
<p><u>Game Items</u></p> <p>7. Blocking out what people might say if you lose or don't perform well (e.g., comments from parents, coach, friends, or spectators)?</p>	<p>Did you think about what people might say if you lost? How do you think this affected your performance?</p>
<p>13. Being assertive when the opportunity presents itself (e.g., driving to the basket when you get a step on your opponent, etc.)?</p>	<p>Did you drive if your opponent was too close? Did you shoot when you were open? When you had a step on your opponent did you take the ball to the hole?</p>
<p>16. Setting challenging, yet attainable goals for each game?</p>	<p>Did you think of things you would like to accomplish during the game such as scoring a certain number of points, calling cutters when playing zone defence, etc.?</p>
<p><u>Immediately After Game Items</u></p> <p>3. Remembering the good things that happened, and incorporating them into mental preparation for the next game (e.g., "I blocked out well", I saw the ball at all times", etc.)</p>	<p>Did you spend at least 5 minutes thinking about the good things that happened and how you could incorporate them into the next game?</p>
<p><u>Practice Items</u></p> <p>3. Arriving at practice totally committed to do your best?</p>	<p>Did you arrive at practice focused and committed to doing your best?</p>
<p>9. Improving your consistency and fine tuning the skills you can already perform, rather than just going through the motions (e.g., making sure your cross over dribble is low and fast, etc.)?</p>	<p>When practicing skills you always practice (e.g., ball handling, lay ups, blocking out, etc.), did you try to do the skills accurately and precisely (e.g., making sure you follow through on your shot)?</p>

Table 8

Timeline for questionnaire completion in the second study

Basketball

Date	Questionnaire
November 10	Sport specific questionnaire
November 10	Predictive validity of first practice
November 11	Predictive validity of second practice
November 12	Predictive validity of third practice
November 13	Predictive validity of first game
November 14	Predictive validity of second game
November 15	Predictive validity of third game

Swimming

Date	Questionnaire
November 30	Sport specific questionnaire
November 30	Predictive validity of first practice
December 1	Predictive validity of second practice
December 2	Predictive validity of third practice
December 4	Predictive validity of first race
December 5	Predictive validity of second race
December 6	Predictive validity of third race

responding, to emphasize completing each questionnaire based only on the performance of the game/race or practice immediately prior to data collection, and to give a detailed explanation of how to complete the questionnaire correctly (see Appendix I). The researcher discussed the first two points prior to the completion of each predictive validity questionnaire (see Appendix I).

The practice questionnaires were completed in the bleachers for basketball players and at the side of the pool for swimmers. The game/race questionnaires were answered in the back of the bleachers or in the locker room after a game/race for both sports. If the questionnaires were completed in the bleachers, the athletes selected a location in which there weren't any spectators, coaches, or media nearby. These areas were selected for questionnaire completion because of their convenience for both the athletes and their coaches. As coaches were required to complete questionnaires for more than one athlete, they were asked to complete the questionnaires at home, and the researcher arranged to pick up the questionnaires the next day.

The researcher was present during the completion of the questionnaires for practices in order to ensure that the athletes' responded independently and were attending to the task while completing the questionnaires (i.e., they were focused and attending while completing the questionnaires).

Results

Predictive Validity

The predictive validity of the sport specific questionnaires for basketball players and swimmers was evaluated by comparing each basketball player's/swimmer's responses on the sport specific questionnaires to their responses on questionnaires completed just after practices and games/races. The predictive validity of the sport

specific questionnaires for basketball and swimming coaches was evaluated by comparing each basketball and swimming coach's responses on the sport specific questionnaires to their responses on a questionnaires completed just after practices and games/races. The Pearson Product Moment Correlation Coefficient was used to evaluate predictive validity.

In order to compute predictive validity scores, composite scores were obtained by combining several items on the questionnaires completed just after practice and games/races (see Appendices R and S). There was one composite score calculated for each item on a sport specific questionnaire. Appendix T contains a list of the composite scores for volleyball players, runners, and their coaches (see Appendix T). The composite score was calculated by: (a) summing the items on a questionnaire which make up that composite score and dividing the sum by the number of items in the composite (some of the items were reverse scored, i.e., if the value was '2', the item would be scored as '10-2', or '8'); and (b) obtaining the mean composite scores by adding up the composite scores across the three administrations of a questionnaire and dividing by the number of administrations. After composite scores had been calculated, the predictive validity of the items for an athlete or a coach sport specific questionnaire were calculated by correlating the appropriate composite score with the appropriate item on that athlete's (or coach's) sport specific questionnaire.

The sport specific questionnaire was designed to determine areas in which the athlete wants help and the predictive validity questionnaire was designed to determine mental skill areas which the athlete utilized during specific practices and competitions. As such, these two questionnaires are worded differently and a negative correlation is expected between the sport specific questionnaire and the questionnaires completed after practices and games/races. In other words, if an athlete indicated that they

needed to think more positively at practices (a high rating on the sport specific questionnaire), we would expect them to say that they had few positive thoughts at any one practice (a low rating on the predictive validity questionnaire completed just after practice).

The predictive validity of the sport specific questionnaire for athletes was low (see Appendix U). The correlation coefficient for each of the items ranged from -0.646 to 0.459. There was only one item, game response number 20 ("staying supportive of and praising teammates' performance"), which had a correlation coefficient significant at the 0.01 level. No items were significantly correlated at the .05 level. The overall correlation coefficient for game items was -0.075, for practice items -0.162, for immediately after game items 0.091, and for all items 0.044. The predictive validity for various constructs was also low (see Appendix U), as the correlation coefficients ranged from -0.471 to 0.312 and there were no significant correlations.

The predictive validity of the sport specific questionnaire for coaches was low (see Appendix V). The correlation coefficient for each of the items ranged from -0.811 to 0.461. There was only one item, game response number 15 ("giving 100% effort when there are excuses not to"), which had a correlation coefficient significant at the 0.01 level. In addition, practice item number 5 ("maintaining your effort and focus, especially when you are tired or don't feel like being there") had a correlation coefficient significant at the 0.05 level.

Convergent Validity

Although the main purpose of the second study was to evaluate the predictive validity of the sport specific questionnaires for basketball players and swimmers, it also provided another opportunity to examine the rate of agreement between athletes and coaches. As such, the Pearson Product Moment Correlation was used to calculate the

convergent validity of the questionnaire completed just after practices and games/races.

The convergent validity of the questionnaires completed just after games and practices for basketball players and swimmers (see Appendix W) was somewhat higher than the convergent validity of the sport specific questionnaire for volleyball players and runners assessed in the first study (see Appendix L). The correlation coefficient for each of the items ranged from -0.695 to 0.729. There were two items, game item number 12 ("identifying and reacting to your opponents' weaknesses and making adjustments as the game progresses" and "making adjustments as the race progresses") and immediately after game item number 4 ("communicating with your coach"), which had a correlation coefficient significant at the 0.01 level. In addition, game items 3 ("staying relaxed/loose and not getting too nervous"), 10 ("staying energized in difficult situations"), 13 ("being assertive when the opportunity presents itself" and staying positive throughout a race"), 14 ("managing troublesome emotions"), and 18 ("preparing and following a detailed competition and precompetition plan"), as well as immediately after game item number 1 ("evaluating your mental preparation and playing performance for that game/meet") were all significant at the 0.05 level. In comparison, there was 1 item which was significantly positively correlated on the sport specific questionnaire for each of volleyball and running in study one.

Discussion

Predictive Validity

The predictive validity of the sport specific questionnaire was low. The reasons for this could include those presented when discussing the findings for test-retest reliability in Study One, such as the impact of self-monitoring, increased self-awareness, and a lack of familiarity with the constructs. In addition to those reasons

already identified, a longer period of data collection might be desirable in order to adequately identify trends. As well, a larger sample size might be beneficial in order to access a larger range of behaviors. Finally, a detailed analysis of a smaller range of behaviors might be more beneficial. That is, a study could investigate the predictive validity of one or two constructs such as self-talk or goal-setting rather than all items on the sport specific questionnaire.

Convergent Validity

As indicated, the convergent validity of the questionnaires completed just after practices and games/races for basketball players and swimmers was higher than the convergent validity of the sport specific questionnaires for volleyball players and runners in the first study. The questionnaires completed just after practices and games/races in the second study asked the coach or athlete to evaluate specific behaviors at a specific time. As the agreement was higher for these questionnaires, it suggests the need for more operational definitions of some of the items on the sport specific questionnaires that were assessed in the first study, as well as a clarification of the time period of evaluation. With respect to the latter, it might be helpful to ask a coach and/or athlete to visualize a specific practice and/or competition prior to questionnaire completion.

Data Analysis Using Data from Both Studies

Inferential statistics

The data across all 4 sports was used to calculate some inferential statistics. The responses from the column 'is this something you need to improve on' on the athlete sport specific questionnaires, and 'is this something that this athlete needs to improve on' on the coach questionnaires from all four sports were used to assess the dependent variable. This dependent variable was called 'area', and consisted of three

levels, competition, practice, and both. 'Competition' was calculated by adding each of the responses from the competition section of the sport specific questionnaires and dividing by the number of items which were answered. 'Practice' was calculated by adding each of the responses from the practice section of the sport specific questionnaires and dividing by the number of items which were answered. 'Both' was calculated by adding 'practice', 'competition', and the items to the 'immediately after competition' section of the questionnaire.

An analysis of variance (ANOVA) was used to calculate whether type of sport (i.e., team or individual) or gender had an impact on the level of response given to the sport specific questionnaire. The Independent variables (IV's), type and gender, each had two levels. The levels for type were team and individual, and the levels for gender were male and female. As indicated, the dependent variable (DV) was area, and it consisted of three levels, competition, practice, and both. Bonferroni procedures were used to keep an overall alpha level of .05. Table 9 contains a summary of the findings from this ANOVA (see Table 9). There were no significant main or interaction effects for any level of the DV. That is, there was no difference in the level of response given by males or females, or by team or individual athletes, for practice, competition, or all items.

An analysis of variance (ANOVA) was also used to assess whether gender, sport, level or some combination of these variables had an impact on the level of response given to the sport specific questionnaires. The IV gender had two levels, male and female. The IV sport had four levels, running, volleyball, basketball, and swimming. The IV level had three levels, high school, university, and other. As indicated, the dependent variable was area, and it consisted of three levels, competition, practice, and both. Bonferroni procedures were used to maintain an

Table 9

Univariate Analysis of Variance

IV = Type of sport in which S participates [i.e., team or individual]
 Gender of S [i.e., male or female]

DV = Average of game answers for 'improvement' column

	F	Significance Level
Type	.981	.325
Sex	2.888	.093
Type * Sex	.310	.579

DV = Average of practice answers for 'improvement' column

	F	Significance Level
Type	.052	.821
Sex	.128	.722
Type * Sex	.107	.745

DV = Average of all [i.e., game, practice, and immediately after] answers for 'improvement' column

	F	Significance Level
Type	.139	.710
Sex	1.535	.219
Type * Sex	.166	.684

overall alpha level of .05. Table 10 contains a summary of this ANOVA (see Table 10). Once again, no significant main or interaction effects were found. That is, the sex of the participant, the level at which they participated, and the sport in which they played had no significant impact on their responses to the sport specific questionnaire.

Familiarity with Sport Psychology Services

A total of 38.7% of the athletes in this study indicated that they had worked with a sport psychologist. They indicated that they had a mean of 3.47 (sd = 4.16) individual sessions, and 4.92 group sessions (sd = 3.40). In addition, on a scale of 1 to 10, where 1 was most helpful, they indicated that the sport psychologist with whom they had worked was helpful at a mean level of 6.43 (sd=2.05). With respect to coaches, 50% of the coaches in this study had asked a sport psychologist to work with an athlete whom they had coached. The coaches indicated that the sport psychologist was helpful at a mean rating of 5.8 (sd = 3.11).

Use of Mental Skills

All of the following items were rated on a 10-point Likert-type scale, where 1 = "never or not at all", 5 = "somewhat or some of the time", and 10 = "a lot or all the time".

Athlete. With respect to imagery, the athletes indicated that they used imagery some of the time (m = 6.22), that they watched themselves as if on a camcorder 48.3% of the time, and that they felt as if they were actually performing 64.9% of the time. They said that they sometimes used imagery to prepare themselves for training (m = 5.43), to perfect skills (m = 5.51), and to make technical corrections (m = 5.58). They said they more frequently used imagery to see themselves achieve their ultimate goal (m = 7.64) and to see themselves being successful (m = 8.36).

With respect to self-talk, the athletes indicated that they sometimes experienced negative self-talk during practices (m = 4.82) and competitions (m = 4.13), but more

Table 10

Univariate Analysis of Variance

IV = Gender of S [i.e., male or female]
 Sport in which S participates [i.e., running, volleyball, basketball, swimming]
 Level of sport at which S participates [i.e., high school, university, other]

DV = Average of game answers for 'improvement' column

	F	Significance Level
Sex	1.772	.187
Sport	.831	.481
Level	2.244	.113
Sex * Sport	.204	.893
Sex * Level	.156	.854
Sport * Level	2.462	.121
Sex * Sport * Level	.033	.855

DV = Average of practice answers for 'improvement' column

	F	Significance Level
Sex	.245	.622
Sport	.232	.674
Level	1.742	.182
Sex * Sport	.187	.905
Sex * Level	.226	.798
Sport * Level	2.686	.105
Sex * Sport * Level	.014	.905

DV = Average of all answers for 'improvement' column

	F	Significance Level
Sex	.888	.349
Sport	.272	.846
Level	2.761	.068
Sex * Sport	.218	.883
Sex * Level	.015	.985
Sport * Level	1.998	.161
Sex * Sport * Level	.001	.977

frequently experienced positive self-talk ($m = 6.75$ and 7.10 respectively).

In terms of goals, the athletes indicated that they set daily goals ($m = 5.35$), goals for several years from now ($m = 6.41$), and ultimate dream goals ($m = 6.82$) some of the time. Whereas, they set goals for each competition ($m = 7.71$) and seasonal goals ($m = 8.58$) more often. With respect to anxiety, they reported being able to manage their anxiety at competitions fairly well ($m = 7.75$), being both physically ($m = 7.25$) and mentally ($m = 7.29$) relaxed. In terms of focus, the athletes indicated that they felt fairly connected to what they were doing at competition ($m = 7.87$), and they had some plans on how to tune-out distracters ($m = 6.70$) and how to cope with the pressures at competition ($m = 6.54$). With respect to a precompetition plan (PCP), the athletes had a time frame for when to complete a PCP some of the time ($m = 5.48$), and this PCP sometimes included imagery ($m = 6.02$), a reminder to focus on what has previously worked ($m = 6.91$), and a refocusing plan ($m = 6.81$). Their PCP more frequently included a game plan ($m = 7.33$), individual goals ($m = 7.50$), positive self-talk ($m = 7.93$), and a physical warmup ($m = 8.75$).

Coach. With respect to imagery, coaches indicated that they were very familiar with imagery ($m = 8.5$), but less able to tell when the athletes whom they coached were using it ($m = 5.78$). Similarly, they indicated that they were very familiar with self-talk ($m = 8.6$), but less able to recognize if an athlete was using it ($m = 6.56$). In terms of goal-setting, coaches were both very familiar ($m = 9.6$) with and able to recognize ($m = 9.0$) it. Coaches indicated that they were quite familiar with relaxation, focusing, and precompetition planning ($m = 8.3, 8.7, \text{ and } 8.4$ respectively), and somewhat able to recognize when an athlete was using each of these ($m = 6.67, 6.78, \text{ and } 7.61$ respectively).

Summary and Future Research

The sport specific questionnaires for volleyball players and runners appear to be face valid and user friendly. The test-retest reliability of items ranged from low to moderate, and was most acceptable for university-level volleyball players. The convergent validity of the sport specific questionnaires for volleyball and running was low, as there was little agreement between athletes and coaches in terms of areas of mental preparation in which an athlete needs help. Runners and volleyball coaches felt that athletes would benefit from working with a sport psychologist in several areas of mental preparation, whereas volleyball players and running coaches felt that there were only a few areas of mental preparation in which an athlete would benefit from working with a sport psychologist. Volleyball and running coaches were both confident in their ability to evaluate the mental skill strengths and weaknesses of the athletes whom they coached, although volleyball coaches were somewhat more confident than running coaches.

With respect to the second study, the predictive validity of the basketball and swimming questionnaires was low. That is, there was little agreement between the sport specific questionnaire and a questionnaire which was completed after three practices and three games/races.

Finally, using data from both studies, no differences were found between gender (i.e., male or female), level (i.e., high school or university), and type of sport (i.e., team or individual) for how much athletes needed to improve in areas of mental preparation.

Interestingly, when coaches were asked to evaluate their ability to recognize whether athlete's (in general) were using certain mental skills such as self-talk and visualization on the general questionnaire, they rated themselves at a moderate level

(i.e., 5 or 6 on a 10-point scale). But, when they were asked how confident they were evaluating a specific athlete whom they coached on the sport specific questionnaire, their confidence in their ratings was higher (i.e., 7 or 8 on a 9-point scale). This suggests that, although coaches recognize their difficulty in evaluating private behaviors at a general level, they override this lack of certainty when evaluating individual athletes. When evaluating an individual athlete's behavior with whom they are familiar, they feel much more confident in their ability to assess both overt and covert behavior. Yet, their evaluation of this behavior is inconsistent with the athlete's self-evaluation. Perhaps prompting coaches to explain the specific behaviors they are using to evaluate various items would require them to be more thoughtful of their ratings.

Future research in the areas examined in these studies might proceed in several directions. First, more athletes in various sports should be sampled in order to determine if these findings are sport specific or simply a function of the athletes who participated in these studies. Second, in order to further evaluate the face validity of the items on the sport specific questionnaires, retired athletes could be sampled to evaluate their view of the importance of the current items. Third, considering that coaches were very confident in their ability to evaluate the mental skill strengths and weaknesses of the athletes whom they coached, it would be informative to assess how coaches would operationalize the presence or absence of certain behaviors for athletes that the coaches are asked to evaluate. For example, coaches could be asked to describe how they evaluate whether an athlete needs to improve in "thinking positively". Fourth, as the test-retest reliability of the sport specific questionnaires was low for some items, it might be beneficial to provide each athlete with a detailed description (including sport specific examples) of each mental skill area, and ask them

to self-monitor their own behavior over a few practices and games/races prior to initial questionnaire completion. As well, the athletes should be encouraged to think of (and reflect upon) several specific practices and games for several minutes prior to completing the questionnaire. Fifth, in order to better evaluate the predictive validity of the sport specific questionnaire, more athletes should be observed over a longer period of time. As well, fewer behaviors might be evaluated in more detail through several methodologies (e.g., self report questionnaire, self-talk diary, direct observation, etc.).

References

- Albrecht, R.R., & Feltz, D.L. (1987). Generality and specificity of attention related to competitive anxiety and sport performance. Journal of Sport Psychology, 9, 231-248.
- Allen, M.J., & Yen, W.M. (1979). Introduction to measurement theory. Monterey, CA: Brooks/Cole.
- Anshel, M.H. (1987). Psychological inventories used in sport psychology research. The Sport Psychologist, 1, 331-349.
- Anshel, M. (1990). Sport psychology: From theory to practice. Scottsdale, Arizona: Gorsuch Scarisbrick.
- Averill, J.R. (1982). Anger and aggression. New York: Springer-Verlag.
- Bell, K.F. (1983). Championship thinking: The athlete's guide to winning performance in all sports. Englewood Cliffs, NJ: Prentice-Hall.
- Booth, E. (1958). Personality traits of athletes as measured by the MMPI. Research Quarterly, 29, 127-138.
- Boutcher, S.H., & Crews, D.J. (1987). The effect of a preshot attentional routine on a well-learned skill. International Journal of Sport Psychology, 18, 30-39.
- Brichin, M., & Cattell, R.B. (1949). Manual for the Sixteen Personality Factor Questionnaire. Champaign, IL: The Institute for Personality and Ability Testing.
- Burton, D. (1989). Winning isn't everything: Examining the impact of performance goals on collegiate swimmers' cognitions and performance. The Sport Psychologist, 32, 105 - 132.
- Butler, R.J., & Hardy, L. (1992). The performance profile: theory and application. The Sport Psychologist, 6, 253-264.
- Carron, A.V. (1988). Group dynamics in sport. London, ON: Spodym.

Cockerill, I.M., Nevill, A.M., Lyons, N. (1991). Modelling mood states in athletic performance. Journal of Sports Sciences, 9, 205-212.

Cohn, P.J., Rotella, R.J., & Lloyd, J.W. (1990). Effects of a cognitive behavioral intervention on the preshot routine and performance in golf. The Sport Psychologist, 4, 33-47.

Cone, J.D. (1993). The current state of behavioral assessment. European Journal of Psychological Assessment, 9(3), 175-181.

Cone, J.D. (1978). The behavioral assessment grid (BAG): A conceptual framework and a taxonomy. Behavior Therapy, 9, 882-888.

Cone, J.D. (1980). Template matching procedures for idiographic behavioral assessment. Paper presented at the meeting of the Association for the Advancement of Behavior Therapy, New York.

Cone, J.D. (1981). Psychometric considerations. In M. Hersen, & A.S. Bellack (Eds.), Behavioral assessment (pp. 38-68). New York: Pergamon.

Connelly, D., & Rotella, R.J. (1991). The social psychology of assertive communication: Issues in teaching assertiveness skills to athletes. The Sport Psychologist, 5, 73-87.

Curtis, B., Smith, R.E., & Smoll, F. L. (1979). Scrutinizing the skipper: A study of leadership behaviors in the dugout. Journal of Applied Psychology, 64, 391-400.

Dale, G.A., & Wrisberg, C.A. (1996). The use of a performance profiling technique in a team setting: Getting the athletes and coach on the "same page". The Sport Psychologist, 10, 261-277.

Dewey, D., Brawley, L., & Allard, F. (1989). Do the TAIS attentional-style scales predict how information is processed? Journal of Sport & Exercise Psychology, 11, 171-186.

Doyle, J., & Parfitt, G. (1997). Performance profiling and construct validity. The Sport Psychologist, 11, 411-425.

Doyle, J., & Parfitt, G. (1996). Performance profiling and predictive validity. Journal of Applied Sport Psychology, 8, 160-170.

Ebbeson, E.D., Duncan, B., & Konecni, D.J. (1975). Effects of content of verbal aggression on future verbal aggression: A field experiment. Journal of Experimental Social Psychology, 11, 192-204.

Ericsson, K.A., Kramp, R.T., & Tesch-Romer, C. (1993). The role of deliberate practice in the acquisition of expert performance. Psychological Review, 100, 363-406.

Evans, V., & Quarterman, J. (1983). Personality characteristics of successful and unsuccessful black female basketball players. International Journal of Sport Psychology, 14, 105-115.

Eysenck, H.J., & Eysenck, S.B.G. (1963). The Eysenck Personality Inventory. San Diego, CA: Educational and Industrial Testing Service.

Eysenck, H.J., Nias, D.K.B., & Cox, D.N. (1982). Sport and personality. Behavior Research and Therapy, 4(1), 1-56.

Feltz, D.L., & Landers, D.M. (1983). The effects of mental practice on motor skill learning and performance: A meta-analysis. Journal of Sport Psychology, 5, 25 - 57.

Fernandez-Ballesteros, R. (1993). Behavioral assessment: Dying, vanishing or still running? European Journal of Psychological Assessment, 9(3), 159-174.

Fogarty, G.J. (1995). Some comments on the use of psychological tests in sport settings. International Journal of Sport Psychology, 26, 161-170.

Ford, J.D., & Kendall, P.C. (1979). Behavior therapists' professional behaviors: Converging evidence of a gap between theory and practice. The Behavior Therapist,

2(5), 37-38.

Ford, S.K., & Summers, J.J. (1992). The factorial validity of the TAIS attentional-style subscales. Journal of Sport and Exercise Psychology, 14, 283-297.

Gauvin, L., & Russell, S.J. (1993). Sport-specific and culturally adopted measures in sport and exercise psychology research: Issues and strategies. In R.N. Singer, M.Murphey, J.K. Tennant (Eds.), Handbook on research in sport psychology (pp.891-900). New York: Macmillan.

Geron, E., Furst, D., Rotstein, P. (1986). Personality of athletes participating in various sports. International Journal of Sport Psychology, 17, 120-135.

Goldfried, M.R., & Kent, R.N. (1972). Traditional versus behavioral assessment: A comparison of methodological and theoretical assumptions. Psychological Bulletin, 77, 409-420.

Goldfried, M.R., & Pomeranz, D.M. (1968). Role of assessment in behavior modification. Psychological Reports, 23, 75-87.

Goldfried, M.R., & Sprafkin, J.N. (1976). Behavioral personality assessment. In J.T. Spence, R.C. Carson, & J.W. Thibaut (Eds.), Behavioral approaches to therapy. Morristown, NJ: General Learning Press.

Gould, D. (1992). Goalsetting for peak performance. In J. Williams (Ed.), Applied sport psychology: Personal growth to peak performance (2nd ed.) (pp. 158-169). Mountain View, CA: Mayfield.

Gould, D., Hodge, K., Peterson, K., & Gianni, J. (1989). An exploratory examination of strategies used by elite coaches to enhance self efficacy in athletes. Journal of Sport and Exercise Psychology, 11, 128-140.

Gould, D., Tammen, V., Murphy, S., & May, J. (1989). An examination of U.S. Olympic sport psychology consultants and the services they provide. The Sport

Psychologist, 3, 300 - 312.

Greenspan, M.J., & Feltz, D.L. (1989). Psychological interventions with athletes in competition situations: A review. The Sport Psychologist, 3, 219-236.

Harris, D.V., & Harris, B.L. (1984). The athlete's guide to sports psychology: Mental skills for physical people. New York: Liesure Press.

Harris, D.V., & Williams, J.M. (1993). Relaxation and energizing techniques for regulation of arousal. In J.M. Williams (Ed.), Applied sport psychology: Personal growth to peak performance (pp. 185-199). Mountainview: CA: Mayfield Publishing Co.

Hartmann, D.P., Roper, B.L., & Bradford, D.C. (1979). Some relationships between behavioral and traditional assessment. Journal of Behavioral Assessment, 1, 3-21.

Hathaway, S., & McKinley, J. (1943). MMPI Manual. New York: Psychological Corporation.

Hayes, S.C., Rosenfarb, I., Wulfert, E., Munt, E.D., Korn, Z., & Zettle, R.D. (1985). Self-reinforcement effects: An artifact of social standard setting. Journal of Applied Behavior Analysis, 18, 201-214.

Hazeleus, S.L., & Deffenbacher, J.L. (1986). Relaxation and cognitive treatments of anger. Journal of Consulting and Clinical Psychology, 54, 222-226.

Heil, J. & Henschen, K. (1996). Assessment in sport and exercise psychology. In J.L. Van Raalte, & B.W. Brewer (Eds.), Exploring Sport and Exercise Psychology. Washington: American Psychological Association.

Johnston-O'Conner, E.J., & Kirschenbaum, D.S., (1986). Something succeeds like success: Positive self-monitoring for unskilled golfers. Cognitive Therapy and Research, 6, 335-342.

Jones, G. (1993). The role of performance profiling in cognitive behavioral interventions in sport. The Sport Psychologist, 7, 160-172.

Kane, J.E. (1980). Personality research: The current controversy and implications for sports studies. In W.F. Straub (Ed.), Sport psychology: An analysis of athlete behavior (2nd. ed.). Ithaca, NY: Movement.

Kelly, G.A. (1955). The psychology of personal constructs. Vols. I & II. New York: Norton.

Kirschenbaum, D.S., Ordman, A.M., Tomarken, A.J., & Holtzbauer, R. (1982). Effects of differential self-monitoring and level of mastery on sports performance: Brain power bowling. Cognitive Therapy and Research, 6, 335-342.

Klavora, P. (1975). Application of the Spielberger trait-state theory and STAI in pre-competition anxiety research. Paper presented to the North American Society for the Psychology of Sport and Physical Activity, State College, Pennsylvania.

Landers, D.M., & Boutcher, S.H. (1993). Arousal-performance relationships. In J.M. Williams (Ed.), Applied sport psychology: Personal growth to peak performance (pp. 170-184). Mountainview: CA: Mayfield Publishing Co.

LaPlace, J. (1954). Personality and its relationship to success in professional baseball. Research Quarterly, 25, 313-319.

LeUnes, A.D., & Nation, J.R. (1989). Sport psychology: An introduction. Chicago, IL: Nelson-Hall Inc.

LeUnes, A.D., & Nation, J.R. (1982). Saturday's heroes: A psychological portrait of college football players. Journal of Sport Behavior, 5, 139-149.

Lines, J.B., Schwartzman, L., Tkachuk, G., Leslie-Toogood, S.A., & Martin, G.L. (in press). Behavioral assessment in sport psychology consulting: Applications to swimming and basketball. Journal of Sport Behavior.

Mahoney, M.J. (1989). Sport Psychology. In I.S. Cohen (Ed.), The G. Stanley Hall lectures series (Vol.9, pp.97-134). Washington, DC: American Psychological Association.

Mahoney, M.J., & Epstein, M.L. (1981). The assessment of cognition in athletes. In T.V. Merluzzi, C.R. Glass, & M. Genest (Eds.), Cognitive Assessment (pp. 435-451). New York: Guilford.

Mahoney, M.J., Gabriel, T.J., & Perkins, T.S. (1987). Psychological skills and exceptional athletic performance. The Sport Psychologist, 1, 181-199.

Martens, R. (1987). Coaches guide to sport psychology. Champaign, IL: Human Kinetics.

Martens, R. (1977). The Sport Competition Anxiety Test. Champaign, IL: Human Kinetics.

Martens, R., Burton, D., Vealey, R.S., Bump, L.A., & Smith, D. (1982). Cognitive and somatic dimensions of competition anxiety. Paper presented at the annual meeting of the North American Society for the Psychology of Sport and Physical Activity, University of Maryland, College Park.

Martens, R, Vealey, R.S., & Burton, D. (1990). Competitive anxiety in sport. Champaign, IL: Human Kinetics.

Martin, G.L. (1997). Sport psychology consulting: Practical guidelines from behavior analysis. Winnipeg, MB: Sport Science Press.

Martin, G.L, Lepage, R., & Koop, S. (1983). Applications of behavior modification for coaching age-group competitive swimmers. In G.L. Martin & D. Hrycaiko (Eds.), Behavior modification and coaching: Principles, procedures, and research. Springfield, IL: Charles C. Thomas.

Martin, G.L., & Pear, J. (1999). Behavior Modification: What it is and how to do it

(5th ed.). New Jersey: Prentice Hall.

Martin, G.L., & Toogood, A. (1997). Cognitive and behavioral components of a seasonal psychological skills training program for competitive figure skaters.

Cognitive and Behavioral Practice, 4, 383-404.

Martin, G.L., Toogood, A., & Tkachuk, G. (1997). Behavioral assessment forms for sport psychology consulting. Winnipeg, MB, Canada: Sport Science Press.

McAuley, E. (1985). Modeling and Self-efficacy: A test of Bandura's model. Journal of Sport Psychology, 7, 283-295.

McCaffrey, N. & Orlick, T. (1989). Mental factors related to excellence among top professional golfers. International Journal of Sport Psychology, 20, 256-278.

McNair, D.N., Lorr, M., & Droppleman, L.F. (1971). Profile of Mood States. San Diego, CA: Educational and Industrial Testing Services.

Mischel, W. (1968). Personality and Assessment. New York: Wiley.

Morgan, W.P. (1980). Sport personology: The credulous-skeptical argument in perspective. In W.F. Straub (Ed.), Sport psychology: An analysis of athlete behavior (2nd. ed.). Ithaca, NY: Movement.

Morgan, W.P. (1978). The mind of the marathoner. Psychology Today, April, pp.38-49.

Morgan, W.P. (1968). Personality characteristics of wrestlers participating in the world championships. Journal of Sports Medicine, 8, 212-216.

Morgan, W.P., & Johnson, R. (1978). Personality characteristics of successful and unsuccessful oarsmen. International Journal of Sport Psychology, 9, 119-133.

Moritz, S., Hall, C.R., Martin, K.A., & Vadocz, E. (1996). What are confident athletes imaging? An examination of image content. The Sport Psychologist, 10, 171-179.

Murphy, S.M. (1994). Imagery interventions in sport. Medicine and Science in sports and exercise, 26, 486 - 494.

Murphy, K.R., & Davidshofer, C.O. (1998). Psychological testing: Principles and applications. Upper Saddle River, New Jersey: Prentice Hall.

Murphy, S., & Jowdy, D. (1992). Imagery and mental rehearsal. In T.Horn (Ed.), Advances in sport psychology (pp. 221-250). Champaign,IL: Human Kinetics.

Nelson, R.O. (1983). Behavioral assessment: Past, present, and future. Behavioral assessment, 5, 195-206.

Nelson, R.O., & Hayes, S.C. (1979). Some current dimensions of behavioral assessment. Behavioral Assessment, 1, 1-16.

Nelson, R.O., & Hayes, S.C. (1986). Evaluating the quality of behavioral assessment. In R.O. Nelson, & S.C. Hayes (Eds.) Conceptual foundations of behavioral assessment. New York: Guilford.

Nideffer, R.M. (1976). Test of Attentional and Interpersonal Style. Journal of Personality and Social Psychology, 34, 394-404.

Nideffer, R.M. (1976b). The inner athlete: Mind plus muscle for winning. New York: Thomas Y. Crowell Company.

Nideffer, R.M. (1981). The ethics and practice of applied sport psychology. Ithaca, NY: Movement Publications.

Nideffer, R.M. (1985). Athlete's guide to mental training. Champaign, IL: Human Kinetics.

Nideffer, R.M. (1987). Issues in the use of psychological tests in applied settings. The Sport Psychologist, 1, 18-28.

Nideffer, R.M. (1990). Use of the Test of Attentional and Interpersonal Style (TAIS) in sport. The Sport Psychologist, 4, 285-300.

Nideffer, R.M. (1993). Concentration and attention control training. In J.M. Williams (Ed.), Applied sport psychology: Personal growth to peak performance (pp. 243-261). Mountainview: CA: Mayfield Publishing Co.

Orlick, T. (1986). Psyching for Sport. Champaign, IL: Leisure Sport.

Orlick, T. (1989). Reflections on sport psych consulting with individual and team sport athletes at summer and winter Olympic games. The Sport Psychologist, 3, 358-365.

Orlick, T. (1990). In pursuit of excellence (2nd ed.). Champaign, IL: Human Kinetics.

Orlick, T., & Partington, J. (1988). Mental links to excellence. The Sport Psychologist, 2, 105-130.

Osborne, K., Rudrud, E., & Zezoney, F. (1990). Improved curveball hitting through the enhancement of visual cues. Journal of Applied Behavior Analysis, 23, 371-377.

Ostrow, A.C. (1990). Directory of psychological tests in sport and exercise sciences. Morgantown, WV: Fitness Information Technology.

Peterson, L., Homer, & Wonderlich, S.A. (1982). The integrity of independent variables in behavior analysis. Journal of Applied Behavior Analysis, 15, 477-492.

Powell, F., & Verner, J. (1982). Anxiety and performance in first time parachutists. International Journal of Sport Psychology, 4, 184-188.

Ravizza, K., & Osborne, T. (1991). Nebraska's 3 R's: One-play-at-a-time preperformance routine for college football. The Sport Psychologist, 5, 256-265.

Rawlings, E.I., Rawlings, I.L., Chen, C.S., & Yilk, M.D. (1972). The facilitating effects of mental rehearsal in the acquisition of rotary pursuit tracking. Psychonomic Science, 26, 71-73.

Renger, R. (1993). A review of the Profile of Mood States (POMS) in the prediction of athletic success. Journal of Applied Sport Psychology, 5, 78-84.

Rosenfeld, L., & Wilder, L. (1990). Communication fundamentals: Active listening. Sport Psychology Training Bulletin, 1(5), 1-8.

Rushall, B.S. (1992). Mental skills training for sports: A manual for athletes, coaches, and sport psychologists. Spring Valley, CA: Sport Science Associates.

Rushall, B.S., Hall, M., Roux, L., Sasseville, J., & Rushall, A.C. (1988). Effects of three types of thought content instructions on skiing performance. The Sport Psychologist, 2, 283-297.

Rushall, B.S. (1979). Psyching in sport. London: Pelham Books.

Rushall, B.S. (1973). The status of personality research and applications in sports and physical education. Journal of Sports Medicine and Physical Fitness, 13, 281-290.

Sanderson, F., & Ashton, M. (1981). Analysis of anxiety levels before and after badminton competition. International Journal of Sport Psychology, 12, 23-28.

Schmid, A., & Peper, E. (1993). Training strategies for concentration. In J.M. Williams (Ed.), Applied sport psychology: Personal growth to peak performance (pp. 262-273). Mountainview: CA: Mayfield Publishing Co.

Schwartzman, L., Martin, G., & Toogood, S.A. (1997). A sport specific behavioral checklist for psychological consulting with basketball players. Unpublished honors thesis, University of Manitoba.

Seidentop, D. (1980). The management of practice behavior. In W.F. Straub (Ed.), Sports Psychology: An analysis of athletic behavior. Ithaca, NY: Movement Publications.

Shapiro, M.B. (1966). The single case in clinical-psychological research.

Journal of General Psychology, 74, 3-23.

Shapiro, M.B. (1970). Intensive assessment of the single case: An inductive-deductive approach. In P. Mittler (Ed.), The psychological assessment of mental and physical handicaps (pp. 645-666). London: Methuen.

Silva, III, J.M. (1982). Competitive sport environments: Performance enhancement through cognitive intervention. Behavior Modification, 6, 443-463.

Smith, R.E., & Little, L.M. (1998). A book review. The Sport Psychologist, 12, 104-105.

Smith, R.E., & Smoll, F. L. (1991). Behavioral research and intervention in youth sports. Behavior Therapy, 22, 329-344.

Smith, R.E., & Smoll, F. L. (1990). Self-esteem and children's reactions to youth sport coaching behaviors: A field study of self-enhancement processes. Developmental Psychology, 26, 987-993.

Smith, R.E., Smoll, F.L., & Christensen, D.S. (1996). Behavioral assessment and interventions in youth sports. Behavior Modification, 20 (1), 3-44.

Smith, R.E., Smoll, F. & Curtis, B. (1979). Coach effectiveness training: A cognitive-behavioral approach to enhancing relationship skills in youth coaches. Journal of Sport Psychology, 1, 59-75.

Smith, R.E., Smoll, F. & Curtis, B. (1978). Coaching behaviors in Little League baseball. In F.L. Smoll & R.E. Smith (Eds.), Psychological perspectives in youth sports (pp. 173-201). Washington, DC: Hemisphere.

Smith, R.E., Smoll, F. L., & Hunt, E.B. (1977). A system for the behavioral assessment of athletic coaches. Research Quarterly, 48, 401-407.

Smith, R.E., Zane, N.W.S., Smoll, F.L., & Coppel, D.B. (1983). Behavioral assessment in youth sports: Coaching behaviors and children's attitudes. Medicine

and Science in Sports and Exercise, 15, 208-214.

Spielberger, C.D., Gorsuch, R.L., & Lushene, R.L. (1970). Manual for the State-Trait Anxiety Inventory. Palo Alto, CA: Consulting Psychologists Press.

Straub, W.F. (Ed.). (1978). Sport psychology: An analysis of athlete behavior. Ithaca, NY: Movement.

Straub, W.F., & Williams, J.M. (1984). Cognitive sport psychology. Lansing, NY: Sport Science Associates.

Strean, W.B., & Roberts, G.C. (1992). Future directions in applied sport psychology. The Sport Psychologist, 6, 55-65.

Suinn, R.M. (1989). Bervention for stress management in sports. In D. Hackfort & C.D. Spielberger (Eds.), Anxiety in sports: An international perspective (pp. 203-214). New York: Hemisphere.

Swan, G.E., & MacDonald, M.L. (1978). Behavior therapy in practice: A national survey of behavior therapists. Behavior Therapy, 9, 799-807.

Tavis, C. (1984). Anger: The misunderstood emotion. New York: Simon & Schuster/Touchstone.

Terry, P. (1995). The efficacy of mood state profiling with elite performers: A review and synthesis. The Sport Psychologist, 9, 309-324.

Thakur, G., & Ojha, M. (1981). Personality differences of Indian table-tennis, badminton, and football players on primary source traits of the 16PF. International Journal of Sport Psychology, 12, 196-203.

Tutko, T.A., Lyon, L., & Oglive, B.C. (1969). Athletic Motivation Inventory. San Jose, CA: Institute for the Study of Athletic Motivation.

Vallerand, R.J. (1983). Attention and decision making: A test of the predictive validity of the Test of Attentional and Interpersonal Style (TAIS) in a sport setting.

Journal of Sport Psychology, 3, 149-165.

VanRaalte, J.M., & Brewer, B.W. (Eds.). (1996). Exploring sport and exercise psychology. Washington: American Psychological Association.

VanRaalte, J.M., Brewer, B.W., Rivera, P.M., Petitpas, A.J. (1994). The relationship between observable self-talk and competitive junior tennis players' match performance. Journal of Sport and Exercise Psychology, 16, 400-415.

Van Schoyck, R.S., & Grasha, A.F. (1981). Attentional style variations and athletic ability: The advantages of a sport-specific test. Journal of Sport Psychology, 3, 149-165.

Vermilyea, B.B., Barlow, D.H., & O'Brien, G.T. (1984). The importance of assessing treatment integrity: An example in the anxiety disorders. Journal of Behavioral Assessment, 6, 1-11.

Weinberg, R.S. (1981). The relationship between mental preparation strategies and motor performance: A review and critique. Quest, 33, 195-213.

Weinberg, R.S. (1994). Goal setting and performance in sport and exercise settings: A synthesis and critique. Medicine and Science in Sport and Exercise, 26, 469 - 477.

Weinberg, R.S., & Gould, D. (Eds.), (1995). Foundations of sport and exercise psychology. Champaign, IL: Human Kinetics.

Weinberg, R.S., Stichter, T., Richardson, P. (1994). Effects of a seasonal goalsetting program on lacrosse performance. The Sport Psychologist, 8, 166 - 175.

Whelan, J.P., Mahoney, M.J., & Meyers, A.W. (1991). Performance enhancement in sport: A cognitive behavioral domain. Behavior Therapy, 22, 307-327.

Williams, L.R.T., & Parkin, W.A. (1980). Personality factor profiles of three

hockey groups. International Journal of Sport Psychology, 11, 113-120.

Williams, R., & Youssef, Z.(1972). Consistency of football coaches in stereotyping the personality of each position's player. International Journal of Sport Psychology, 3, 3-11.

Ziegler, S.G. (1994). The effects of attentional shift training on the execution of soccer skills: A preliminary investigation. Journal of Applied Behavior Analysis, 27, 545-552.

Appendix A

Mean (and standard deviation) of the sport specific questionnaires for volleyball players, runners, swimmers, and basketball players

The sport specific questionnaires contain the means (and standard deviations), across all athletes in that sport, for each column. The standard deviation is the number which is in 'parentheses'.

Name: _____

Date: _____

SPORT PSYCHOLOGY QUESTIONNAIRE FOR VOLLEYBALL PLAYERS

This questionnaire was designed to help you to identify areas for mental skills training at practices and competitions in which players need to improve, and for which they might need help from a sport psychologist to achieve that improvement. Please answer each question honestly. All information will be kept confidential.

For each question, write in the number that best expresses your reaction in terms of the following scale:

Definitely Not				Sometimes or to Some Extent				Definitely Yes
1	2	3	4	5	6	7	8	9

MATCHES	Is this item important for players?	Is this something that most players need to improve on?	Is this something you need to improve on?	If you need to improve, and if a sport psychologist was available, would you like some help?
Would you say that, just before or during a match, you need to improve at:				
1. Thinking positive thoughts? (e.g., "I'm going to kill this one", "This take is going right to the setter", etc.)	8.36 (1.2)	6.5 (1.9)	5.44 (2.4)	4.21 (2.8)
2. Tuning out negative thoughts? (e.g., "I hope they don't serve to me", etc.)	8.67 (0.63)	6.97 (1.83)	5.22 (2.73)	4.72 (2.89)
3. Staying relaxed and not getting too nervous: a) just before the game? b) in pressure situations?	7.88 (1.5)	6.36 (1.68)	4.65 (2.24)	4.06 (2.55)
4. Maintaining/regaining your confidence in difficult situations? (e.g., when you shank a ball out of bounds, you get stuffed, you aren't getting any sets, you carry a ball, etc.)	8.58 (0.91)	7.22 (1.62)	5.78 (2.17)	4.48 (3.00)
5. Maintaining your concentration on the task at hand? (e.g., seeing the ball leave your arms when you receive the serve, etc.)	8.22 (1.4)	6.28 (1.92)	4.83 (2.25)	3.69 (2.79)
6. Blocking out distractors over which you have no control? (e.g., who you are playing against, who is hitting the ball when you are blocking or in the back row, the size of the opponents, the height of the roof, noisy fans, etc.)	7.83 (1.8)	5.89 (2.28)	4.33 (2.39)	3.34 (2.78)
7. Blocking out what other people might say if you lose or don't perform well? (e.g., comments from parent(s), coach, teammates, friends, other players, spectators) Other? _____	7.47 (2.09)	5.83 (2.16)	4.67 (2.32)	3.44 (2.71)
8. Blocking out distractors that don't involve volleyball? (e.g., family, school, relationship problems) Other? _____	7.83 (1.8)	5.97 (2.16)	4.81 (2.45)	3.65 (2.75)

Definitely
Not

Sometimes or
to Some Extent

Definitely
Yes

1 2 3 4 5 6 7 8 9

<p>MATCHES (cont'd)</p>	<p>Is this item important for players?</p>	<p>Is this something that most players need to improve on?</p>	<p>Is this something you need to improve on?</p>	<p>If you need to improve, and if a sport psychologist was available, would you like some help?</p>
<p>9. Refocusing after you get distracted for any reason? (e.g., if the referee blows a call, you hit the first few balls out of bounds, players are trash talking, etc.)</p>	<p>8.5 (0.94)</p>	<p>6.61 (1.34)</p>	<p>4.97 (2.12)</p>	<p>3.66 (2.54)</p>
<p>10. Staying energized in difficult situations? (e.g., when you feel tired or sore, you have a bad warmup, nothing else is going right, etc.)</p>	<p>8.33 (1.07)</p>	<p>6.33 (1.6)</p>	<p>5.17 (2.4)</p>	<p>3.97 (2.92)</p>
<p>11. Communicating tactically with teammates? (e.g., "Two hitters in the back row", "You take long", "I've got it", etc.)</p>	<p>8.69 (0.75)</p>	<p>6.58 (2.09)</p>	<p>5.89 (2.7)</p>	<p>3.38 (2.76)</p>
<p>12. Identifying and reacting to your opponents' weaknesses, and making adjustments as the game progresses? (e.g., tip if the middle is open, hit off/around the block if there are two blockers, etc.)</p>	<p>8.56 (0.81)</p>	<p>6.86 (1.55)</p>	<p>5.83 (2.14)</p>	<p>3.18 (2.83)</p>
<p>13. Being assertive when the opportunity presents itself? (e.g., you kill the ball if there is one blocker, etc.)</p>	<p>8.17 (1.42)</p>	<p>5.56 (2.17)</p>	<p>4.86 (2.41)</p>	<p>2.91 (2.57)</p>
<p>14. Managing troublesome emotions? (e.g., excitement, anger, disappointment, etc.)</p>	<p>8.33 (1.04)</p>	<p>6.67 (1.43)</p>	<p>5.31 (2.36)</p>	<p>4.24 (3.03)</p>
<p>15. Giving 100% effort when there are excuses not to? (e.g., you are playing a team you have played often, you are losing by a large margin, etc.)</p>	<p>8.67 (0.63)</p>	<p>6.86 (2.23)</p>	<p>5.67 (2.46)</p>	<p>3.66 (2.75)</p>
<p>16. Setting challenging yet attainable goals for each match?</p>	<p>7.94 (1.6)</p>	<p>6.03 (1.96)</p>	<p>5.07 (2.39)</p>	<p>3.14 (2.6)</p>
<p>17. Having a better health management plan before and during each match/tournament? (e.g., getting enough sleep, drinking enough water, eating properly, etc.)</p>	<p>8.42 (0.77)</p>	<p>6.69 (1.94)</p>	<p>5.14 (2.58)</p>	<p>3.98 (3.18)</p>
<p>18. Preparing and following a detailed precompetition and competition plan?</p>	<p>7.94 (1.49)</p>	<p>6.22 (1.53)</p>	<p>5.33 (2.29)</p>	<p>3.72 (2.73)</p>
<p>19. Communicating your precompetition needs to others? (e.g., parent(s), coach, teammates, friends, etc.)</p>	<p>7.11 (1.94)</p>	<p>5.4 (1.91)</p>	<p>4.4 (2.23)</p>	<p>2.81 (2.6)</p>
<p>20. Staying supportive of and praising teammates' performance? (e.g., "Good set", "Great hit", "Good take", etc.)</p>	<p>8.58 (0.77)</p>	<p>5.31 (2.36)</p>	<p>4.08 (2.79)</p>	<p>3.0 (2.91)</p>

Definitely
Not

Sometimes or
to Some Extent

Definitely
Yes

1 2 3 4 5 6 7 8 9

IMMEDIATELY AFTER A MATCH Would you say that you need to improve at:	Is this item important for players?	Is this something that most players need to improve on?	Is this something you need to improve on?	If you need to improve, and if a sport psychologist was available, would you like some help?
1. Evaluating your mental preparation and playing performance for that match?	7.42 (1.71)	6.39 (1.48)	5.8 (1.81)	3.79 (3.05)
2. Putting aside a poor performance and focusing on the next match?	8.28 (0.94)	6.75 (1.79)	5.42 (2.51)	4.15 (3.08)
3. Remembering the good things that happened, so that you can incorporate them into mental preparation for the next match?	8.17 (1.18)	6.25 (2.14)	5.39 (2.6)	3.76 (2.95)
4. Communicating with your coach? (e.g., "What can I improve upon?", "What did I do right or wrong?", etc.)	8.17 (1.13)	5.86 (2.11)	4.97 (2.46)	3.09 (2.65)
5. Learning from your mistakes so that you can improve? (e.g., "I will absorb the ball more on serve reception", "I will use more backsets", etc.)	8.53 (0.94)	6.65 (2.02)	5.33 (2.16)	3.19 (2.61)
Additional Concerns about Games or Matches <hr/> <hr/> <hr/>				
PRACTICES Would you say that, at practices, you need to improve at:	Is this item important for players?	Is this something that most players need to improve on?	Is this something you need to improve on?	If you need to improve, and if a sport psychologist was available, would you like some help?
1. Setting specific physical, technical, tactical, and mental goals for every practice?	7.75 (1.48)	6.14 (1.93)	6.23 (1.9)	3.35 (2.85)
2. Keeping a written record of progress in meeting your goals?	5.89 (2.84)	5.72 (2.66)	5.33 (3.04)	2.88 (2.79)
3. Arriving at each practice totally committed to doing your best?	8.69 (0.52)	6.47 (2.35)	5.58 (2.74)	3.66 (3.18)
4. Maintaining your concentration, especially when practice is long, repetitive, or uninteresting?	8.53 (0.74)	7.03 (2.04)	6.25 (2.25)	3.94 (3.28)
5. Maintaining your effort and focus, especially when you're tired, or don't feel like being there?	8.47 (0.77)	7.01 (2.21)	6.28 (2.4)	4.06 (3.28)

Definitely
Not

Sometimes or
to Some Extent

Definitely
Yes

1 2 3 4 5 6 7 8 9

PRACTICES (cont'd)	Is this item important for players?	Is this something that most players need to improve on?	Is this something you need to improve on?	If you need to improve, and if a sport psychologist was available, would you like some help?
6. Making better use of the full practice time? (e.g., volley against the wall between drills, practice your arm action when waiting in line to hit, etc.)	7.03 (2.16)	5.73 (2.01)	4.86 (2.35)	2.53 (2.50)
7. Staying positive when a practice doesn't go well?	8.25 (1.16)	7.11 (1.43)	6.5 (2.12)	3.7 (3.1)
8. Remaining positive when an injury forces you to stop training?	8.17 (1.28)	6.31 (1.86)	4.97 (2.74)	3.31 (2.8)
9. Improving your consistency and fine tuning the skills you can already perform rather than just going through the motions? (e.g., concentrate on your follow through when you are hitting at practices, etc.)	8.5 (0.81)	6.94 (1.57)	6.08 (1.99)	3.58 (2.95)
10. Working more on skill deficiencies?	8.35 (0.95)	6.47 (1.81)	6.09 (1.96)	3.35 (3.0)
11. Practicing mental skills, as well as physical skills?	8.0 (1.33)	6.81 (1.55)	5.97 (1.96)	3.85 (3.14)
12. Not worrying about what other players are doing or how much playing time they are getting? (i.e., concentrating on what <u>you</u> have to do to improve)	8.28 (0.94)	6.88 (1.9)	5.22 (2.6)	4.0 (2.95)
13. Using key words and self-talk to improve your skills? (e.g., "Watch the ball", "Follow-through", etc.)	7.42 (1.75)	6.03 (1.75)	5.14 (2.14)	3.12 (2.7)
14. Making better use of visualization/mental rehearsal to improve skills?	7.72 (1.28)	6.75 (1.7)	5.83 (2.31)	3.7 (3.1)
15. Giving 100% effort and concentration to the task at hand, in order to have quality practices?	8.69 (0.62)	6.86 (1.68)	5.67 (2.53)	3.72 (3.11)
16. Doing serious game simulations, and making them as realistic as possible? (e.g., diving for all balls, pretending you're going around a block, etc.)	8.53 (0.91)	6.86 (1.68)	5.86 (2.49)	3.38 (2.92)
17. Using mental imagery, key words, and self-talk before and during game simulations?	7.69 (1.37)	6.15 (1.54)	5.39 (2.05)	3.63 (3.05)
<u>Additional Concerns about Practices</u> _____ _____ _____				

Name: _____

Date: _____

Race: _____

SPORT PSYCHOLOGY QUESTIONNAIRE FOR RUNNERS

(Middle Distance and Distance)

This questionnaire was designed to help you to identify areas for mental skills training at practices and competitions in which runners need to improve, and for which they might need help from a sport psychologist to achieve that improvement. Please answer each question honestly. All information will be kept confidential.

For each question, write in the number that best expresses your reaction in terms of the following scale:

Definitely Not				Sometimes or to Some Extent				Definitely Yes
1	2	3	4	5	6	7	8	9

COMPETITION	Is this item important for runners?	Is this something that most runners need to improve on?	Is this something you need to improve on?	If you need to improve, and if a sport psychologist was available, would you like some help?
Would you say that, just before or during a meet, you need to improve at:				
1. Thinking positive thoughts? (e.g., "I know I can hit the splits I'm going for", "I'm going for a personal best", etc.)	8.57 (0.83)	7.12 (1.53)	5.4 (2.16)	6.41 (2.29)
2. Tuning out negative thoughts? (e.g., "I hope I don't come in last", "These runners are really fast", etc.)	8.38 (1.61)	7.29 (1.74)	5.76 (2.51)	6.5 (2.61)
3. Staying relaxed and not getting too nervous: a) just before a race? b) in pressure situations?	8.3 (1.05)	7.04 (1.64)	5.32 (2.39)	5.86 (2.65)
4. Maintaining/regaining your confidence in difficult situations? (e.g., you have a bad start/split, you're behind, you feel really nervous, etc.)	8.31 (1.28)	6.88 (1.97)	5.85 (2.46)	6.03 (2.82)
5. Maintaining your concentration during a race? (e.g., focusing on form/technique, concentrating on race strategy, etc.)	8.21 (1.26)	6.43 (2.07)	5.35 (2.44)	5.85 (2.87)
6. Blocking out distractors over which you have no control? (e.g., the time of day of your race, who you're competing against, etc.)	8.0 (1.31)	6.52 (1.89)	5.05 (2.07)	5.55 (2.67)
7. Blocking out what people might say if you don't perform well? (e.g., comments from your parents, coach, friends, or spectators) Other? _____	7.21 (2.19)	5.74 (2.21)	4.93 (2.57)	5.6 (3.09)
8. Blocking out distractors that don't involve running? (e.g., school, family, or relationship problems) Other? _____	7.86 (1.46)	5.98 (2.05)	5.01 (2.48)	5.37 (2.95)
9. Refocusing after you get distracted for any reason? (e.g., while waiting during the heat before yours, a competitor invades your space, etc.)	8.07 (1.49)	6.52 (1.95)	4.92 (2.39)	5.45 (2.7)

Definitely
Not

Sometimes or
to Some Extent

Definitely
Yes

1 2 3 4 5 6 7 8 9

<p>COMPETITION (cont'd)</p>	<p>Is this item important for runners?</p>	<p>Is this something that most runners need to improve on?</p>	<p>Is this something you need to improve on?</p>	<p>If you need to improve, and if a sport psychologist was available, would you like some help?</p>
<p>10. Staying energized and mentally ready in difficult situations? (e.g., when you feel fatigued or ill, your opponents have much faster qualifying times, etc.)</p>	<p>8.33 (0.98)</p>	<p>7.02 (1.81)</p>	<p>6.44 (2.28)</p>	<p>6.39 (2.64)</p>
<p>11. Communicating with your coach before the race? (e.g., specific things on which you need to focus during the race, etc.)</p>	<p>7.12 (2.25)</p>	<p>5.38 (2.09)</p>	<p>4.45 (2.63)</p>	<p>4.28 (2.62)</p>
<p>12. Making adjustments as the race progresses? (e.g., dealing with an opponent's tactics, etc.)</p>	<p>8.29 (0.99)</p>	<p>6.67 (2.14)</p>	<p>6.0 (2.27)</p>	<p>5.55 (2.8)</p>
<p>13. Managing troublesome emotions? (e.g., excitement, anger, disappointment, etc.)</p>	<p>7.57 (1.8)</p>	<p>6.21 (2.14)</p>	<p>4.99 (2.76)</p>	<p>5.45 (3.05)</p>
<p>14. Being assertive and inserting some pace when the opportunity presents itself? (e.g., a tired opponent, near the end of a race, a predetermined kick point, etc.)</p>	<p>8.5 (0.8)</p>	<p>6.48 (1.8)</p>	<p>5.88 (2.33)</p>	<p>5.85 (2.82)</p>
<p>15. Giving 100% effort when there are excuses not to? (e.g., you are running against people you have run against several times, you are placing poorly in a race, you begin to feel fatigued, etc.)</p>	<p>8.48 (0.86)</p>	<p>6.98 (1.91)</p>	<p>6.30 (2.48)</p>	<p>6.05 (2.66)</p>
<p>16. Setting challenging yet attainable goals for each race?</p>	<p>8.14 (1.37)</p>	<p>6.26 (1.94)</p>	<p>4.71 (2.56)</p>	<p>4.83 (2.85)</p>
<p>17. Having a better health management plan before and during a meet? (e.g., getting enough sleep, drinking enough water, eating properly, etc.)</p>	<p>8.55 (0.92)</p>	<p>6.4 (1.86)</p>	<p>5.24 (2.56)</p>	<p>5.2 (2.96)</p>
<p>18. Preparing and following a detailed precompetition and competition plan?</p>	<p>7.56 (1.91)</p>	<p>6.12 (1.87)</p>	<p>5.24 (2.49)</p>	<p>4.85 (2.75)</p>
<p>19. Communicating your precompetition needs to others? (e.g., parent(s), coach, teammates, and friends, etc.)</p>	<p>7.05 (2.18)</p>	<p>5.38 (2.13)</p>	<p>4.45 (2.24)</p>	<p>4.33 (2.75)</p>
<p>20. Staying supportive of and praising teammates' performance?</p>	<p>7.81 (1.64)</p>	<p>4.95 (2.4)</p>	<p>3.67 (2.08)</p>	<p>3.75 (2.87)</p>
<p>IMMEDIATELY AFTER A MEET</p> <p>Would you say that you need to improve at:</p>	<p>Is this item important for runners?</p>	<p>Is this something that most runners need to improve on?</p>	<p>Is this something you need to improve on?</p>	<p>If you need to improve, and if a sport psychologist was available, would you like some help?</p>
<p>1. Evaluating your mental preparation and running performance for that meet?</p>	<p>8.2 (1.15)</p>	<p>6.86 (1.56)</p>	<p>5.34 (2.66)</p>	<p>5.3 (2.82)</p>

Definitely Not 1 2 3 4 Sometimes or to Some Extent 5 6 7 8 Definitely Yes 9

2. Putting aside a poor performance and focusing on the next competition/race?	8.45 (0.83)	6.67 (1.88)	5.88 (2.19)	5.98 (2.53)
3. Remembering the good things that happened, and incorporating them into mental preparation for the next competition/race?	8.24 (1.38)	6.31 (2.03)	4.89 (2.37)	5.28 (2.8)
4. Communicating with your coach? (e.g., "How was my form?", "My strategy?", etc.)	8.12 (1.31)	5.98 (1.94)	4.69 (2.64)	4.63 (2.87)
5. Learning from your mistakes so that you can improve? (e.g., "Stay in good position off the turn", etc.)	8.48 (0.94)	6.5 (1.69)	5.05 (2.51)	5.12 (2.76)
<u>Additional Concerns about Races</u>				

TRAINING				
Would you say that, during training, you need to improve at:	Is this item important for runners?	Is this something that most runners need to improve on?	Is this something you need to improve on?	If you need to improve, and if a sport psychologist was available, would you like some help?
1. Setting specific physical, technical, tactical, and mental goals for every practice?	8.17 (1.46)	6.69 (1.8)	5.77 (2.47)	5.56 (2.92)
2. Keeping a written record of progress in meeting your goals?	7.36 (1.75)	6.33 (1.91)	5.69 (2.75)	5.22 (2.91)
3. Arriving at practice physically and mentally committed to doing your best?	8.29 (1.13)	6.48 (1.99)	5.4 (2.63)	5.68 (3.12)
4. Maintaining your concentration, especially when practice gets long, repetitive, or uninteresting?	8.38 (0.99)	6.71 (1.94)	6.19 (2.59)	5.93 (2.91)
5. Maintaining your effort and intensity, especially when you are tired or don't feel like being there?	8.31 (1.18)	6.9 (1.79)	6.43 (2.57)	6.34 (2.76)
6. Making better use of full practice time? (e.g., run all intervals at the set time, mentally rehearse between intervals, etc.)	7.98 (1.44)	6.21 (1.94)	5.07 (2.68)	5.51 (3.04)

Definitely
Not

1 2 3 4 5 6 7 8 9

Sometimes or
to Some Extent

Definitely
Yes

TRAINING (cont'd)	Is this item important for runners?	Is this something that most runners need to improve on?	Is this something you need to improve on?	If you need to improve, and if a sport psychologist was available, would you like some help?
7. Staying positive when you're having a bad practice?	8.19 (1.29)	6.86 (1.75)	6.12 (2.1)	5.98 (2.67)
8. Remaining positive when an injury forces you to stop training?	8.43 (1.31)	7.6 (1.86)	6.56 (2.56)	6.57 (2.67)
9. Constantly working on improving your technique, strength, or speed? (<i>i.e., not just going through the motions</i>)	8.38 (1.03)	6.98 (1.83)	6.24 (2.25)	5.78 (2.73)
10. Trying new and challenging skills? (<i>e.g., trying to perfect a new racing strategy, etc.</i>)	7.5 (1.61)	6.14 (1.88)	5.61 (2.16)	5.32 (2.78)
11. Practicing mental skills, as well as physical skills?	8.12 (1.27)	7.14 (1.8)	6.08 (2.35)	6.45 (2.73)
12. Not worrying about what other runners are doing? (<i>i.e., concentrating on what <u>you</u> have to do to improve</i>)	8.21 (1.30)	6.98 (1.73)	6.15 (2.32)	6.37 (2.71)
13. Using key words and self-talk to improve your running? (<i>e.g., "Stay loose", "Drive my arms", "Relax and run faster", etc.</i>)	8.31 (1.02)	6.6 (1.85)	5.5 (2.42)	6.02 (2.71)
14. Making better use of visualization/mental rehearsal before practices to improve your skills?	7.81 (1.6)	6.76 (1.82)	5.76 (2.18)	5.83 (2.82)
15. Giving 100% concentration to the task at hand, in order to have quality practices?	8.26 (1.11)	6.74 (1.71)	6.0 (2.32)	6.15 (2.79)
16. Doing serious race simulations during some practices? (<i>e.g., use a start gun, time your splits, run against other club members, wear competitive suits, etc.</i>)	7.38 (2.0)	6.12 (2.44)	5.36 (2.53)	5.1 (3.02)
17. Using self-talk, key words, and imagery before and during race simulations?	8.14 (1.34)	6.57 (2.0)	5.67 (2.49)	6.0 (2.94)
<u>Additional Concerns about Training</u> <hr/> <hr/> <hr/>				

Name: _____

Stroke: _____

Date: _____

SPORT PSYCHOLOGY QUESTIONNAIRE FOR SWIMMERS

This questionnaire was designed to help you to identify areas for mental skills training at practices and competitions in which players need to improve, and for which they might need help from a sport psychologist to achieve that improvement. Please answer each question honestly. All information will be kept confidential.

For each question, write in the number that best expresses your reaction in terms of the following scale:

Definitely Not					Sometimes or to Some Extent				Definitely Yes
1	2	3	4	5	6	7	8	9	

COMPETITION	
Would you say that, just before or during a meet, you need to improve at:	
1. Thinking positive thoughts? (e.g., "I know I can hit the splits I'm going for", "I'm going for a best time", etc.)	6.17 (1.94)
2. Tuning out negative thoughts? (e.g., "I hope I don't come in last", "These swimmers are really fast", etc.)	7.0 (1.67)
3. Staying loose and not getting too nervous: a) just before a race? b) in pressure situations?	5.75 (1.97)
4. Maintaining/regaining your confidence in difficult situations? (e.g., you have a bad start/split, you're behind, you feel really nervous, etc.)	7.17 (1.94)
5. Maintaining your concentration during a race? (e.g., focusing on technique, concentrating on turns, etc.)	6.5 (0.84)
6. Blocking out distractors over which you have no control? (e.g., the time of day of your race, who you're competing against, etc.)	5.33 (1.37)
7. Blocking out what people might say if you don't perform well? (e.g., comments from your parents, coach, friends, or spectators) Other? _____	5.67 (1.86)
8. Blocking out distractors that don't involve swimming? (e.g., school, family, or relationship problems) Other? _____	6.33 (1.86)

Definitely
Not

Sometimes or
to Some Extent

Definitely
Yes

1 2 3 4 5 6 7 8 9

9. Refocusing after you get distracted for any reason? (e.g., while waiting behind the blocks during the heat before yours, a competitor invades your space, etc.)	4.25 (1.17)
10. Staying energized in difficult situations? (e.g., when you feel fatigued or ill, your opponents have much faster entry times, etc.)	6.33 (1.75)
11. Communicating with your coach? (e.g., specific things on which you need to focus during the race, etc.)	5.17 (2.71)
12. Making adjustments as the race progresses? (e.g., to deal with an opponent's tactics, etc.)	5.0 (2.53)
13. Staying positive throughout a race? (e.g., you're feeling pain, you're falling behind, etc.)	6.5 (2.07)
14. Managing troublesome emotions? (e.g., excitement, anger, disappointment, etc.)	7.33 (2.16)
15. Giving 100% effort when there are excuses not to? (e.g., you are swimming against people you have swum against several times, you are placing poorly in a race, you begin to feel fatigued, etc.)	4.67 (2.73)
16. Setting challenging yet attainable goals for each meet?	5.67 (1.75)
17. Having a better health management plan before and during a meet? (e.g., getting enough sleep, drinking enough water, eating properly, etc.)	4.33 (1.51)
18. Preparing and following a detailed precompetition and competition plan?	6.17 (0.98)
19. Communicating your precompetition needs to others? (e.g., parent(s), coach, teammates, and friends, etc.)	5.5 (1.38)
20. Staying supportive of and praising teammates' performance?	4.0 (2.61)

Definitely
Not

Sometimes or
to Some Extent

Definitely
Yes

1 2 3 4 5 6 7 8 9

IMMEDIATELY AFTER A MEET	
Would you say that you need to improve at:	
1. Evaluating your mental preparation and swimming performance for that meet?	6.5 (1.52)
2. Putting aside a poor performance and focusing on the next race/meet?	7.83 (1.17)
3. Remembering the good things that happened, and incorporating them into mental preparation for the next race/meet?	6.83 (1.94)
4. Communicating with your coach? (e.g., "How was my technique?", "My turns?", etc.)	4.83 (2.48)
5. Learning from your mistakes so that you can improve? (e.g., "Explode more off the turn", etc.)	6.5 (1.64)
<u>Additional Concerns about Competitions</u>	

TRAINING	
Would you say that, at practices, you need to improve at:	
1. Setting specific physical, technical, tactical, and mental goals for every practice?	5.08 (2.01)
2. Keeping a written record of progress in meeting your goals?	5.5 (2.88)
3. Arriving at practice totally committed to do your best? (e.g., consistently be stretched before the practice is scheduled to start, etc.)	4.83 (1.94)
4. Maintaining your concentration, especially when practice gets long, repetitive, or uninteresting?	6.92 (1.20)
5. Maintaining your effort and focus, especially when you are tired or don't feel like being there?	6.08 (1.80)

Definitely
Not

Sometimes or
to Some Extent

Definitely
Yes

1 2 3 4 5 6 7 8 9

6. Making better use of full practice time? (e.g., swimming all sets under the set time, practicing good turns at both ends, etc.)	5.5 (1.05)
7. Staying positive when you're having a bad practice?	7.75 (1.08)
8. Remaining positive when an injury forces you to stop training?	5.67 (1.97)
9. Constantly working on improving your technique? (i.e., don't just go through the motions)	5.17 (2.04)
10. Trying new and challenging skills? (e.g., trying to perfect a new stroke or turn, etc.)	4.0 (1.41)
11. Practicing mental skills, as well as physical skills?	5.0 (1.79)
12. Not worrying about what other swimmers are doing? (i.e., concentrating on what <u>you</u> have to do to improve)	6.33 (1.97)
13. Using key words and self-talk to improve your skills? (e.g., on backstroke: "Head still", "Hips high", etc.)	3.33 (1.75)
14. Making better use of visualization/mental rehearsal before practices to improve your skills?	5.08 (1.56)
15. Focusing on having quality practices?	5.33 (1.63)
16. Doing serious race simulations during some practices? (e.g., using a start gun, timing your splits, swimming against other club members, wearing competitive suits, etc.)	4.5 (1.87)
17. Using self-talk, key words, and imagery before and during race simulations?	4.25 (1.41)
<u>Additional Concerns about Practices</u> <hr/> <hr/> <hr/> <hr/>	

Name: _____

Date: _____

SPORT PSYCHOLOGY QUESTIONNAIRE FOR BASKETBALL PLAYERS

This questionnaire was designed to help you to identify areas for mental skills training at practices and competitions in which players need to improve, and for which they might need help from a sport psychologist to achieve that improvement. Please answer each question honestly. All information will be kept confidential.

For each question, write in the number that best expresses your reaction in terms of the following scale:

Definitely Not					Sometimes or to Some Extent				Definitely Yes
1	2	3	4	5	6	7	8	9	

GAMES	
Would you say that, just before or during a game, you need to improve at: 1. Thinking positive thoughts? (e.g., "An easy 2 points", "I'm going to can this one", etc.)	5.4 (2.12)
2. Tuning out negative thoughts? (e.g., thinking, just before a game-tying free throw, "I hope I don't blow this one!", etc.)	4.4 (1.71)
3. Staying relaxed and not getting too nervous: a) just before the game? b) in pressure situations?	5.0 (2.0)
4. Maintaining/regaining your confidence in difficult situations? (e.g., you have a bad warmup, you make a mistake, your coach subs you off, your shot gets blocked, the ball gets stolen from you, your check beats you, etc.)	6.7 (0.95)
5. Maintaining your concentration on the task at hand? (e.g., focusing on the front rim before each shot, taking it one play at a time, etc.)	5.6 (1.65)
6. Blocking out distractors over which you have no control? (e.g., who you are playing against, who you are checking, the gym where you are playing, the fans, etc.)	4.5 (2.51)
7. Blocking out what people might say if you lose or don't perform well? (e.g., comments from parents, coach, friends, or spectators) Other? _____	3.8 (1.32)
8. Blocking out distractors that don't involve basketball? (e.g., school, family, or relationship problems) Other? _____	4.3 (2.58)

Definitely
Not

Sometimes or
to Some Extent

Definitely
Yes

1 2 3 4 5 6 7 8 9

<p>9. Refocusing after you get distracted for any reason? (e.g., an opponent tries to put you off your game, you have a bad first half, the referee makes a bad call, etc.)</p>	<p>5.1 (2.18)</p>
<p>10. Staying energized in difficult situations? (e.g., when you feel fatigued or ill, you have a bad warmup, nothing else is going right, etc.)</p>	<p>5.8 (1.4)</p>
<p>11. Communicating tactically with teammates? (e.g., "You've got helpside", "Take away the baseline", "Take the ball", etc.)</p>	<p>4.0 (2.36)</p>
<p>12. Identifying and reacting to your opponents' weaknesses and making adjustments as the game progresses? (e.g., your shot is not going in, your opponent is taking away the right-hand drive, etc.)</p>	<p>5.5 (1.43)</p>
<p>13. Being assertive when the opportunity presents itself? (e.g., driving for the basket when you get a step on your opponent, etc.)</p>	<p>4.5 (1.78)</p>
<p>14. Managing troublesome emotions? (e.g., excitement, anger, disappointment, etc.)</p>	<p>5.4 (1.51)</p>
<p>15. Giving 100% effort when there are excuses not to? (e.g., you are playing a team you play often, you are losing by a large margin, etc.)</p>	<p>4.3 (1.89)</p>
<p>16. Setting challenging yet attainable goals for each game?</p>	<p>4.3 (1.95)</p>
<p>17. Having a better health management plan before games? (e.g., getting enough sleep, drinking enough water, eating properly, etc.)</p>	<p>4.6 (2.5)</p>
<p>18. Preparing and following a detailed precompetition and competition plan?</p>	<p>4.6 (2.17)</p>
<p>19. Communicating your precompetition needs to others? (e.g., parent(s), coach, teammates, and friends, etc.)</p>	<p>4.4 (1.96)</p>
<p>20. Staying supportive of and praising teammates' performance? (e.g., "Good job", "Nice shot", etc.)</p>	<p>3.5 (2.46)</p>

Definitely
Not

Sometimes or
to Some Extent

Definitely
Yes

1 2 3 4 5 6 7 8 9

IMMEDIATELY AFTER A GAME	
Would you say that you need to improve at:	
1. Evaluating your mental preparation and playing performance for that game?	4.2 (2.39)
2. Putting aside a poor performance and focusing on the next game?	4.9 (2.47)
3. Remembering the good things that happened, and incorporating them into mental preparation for the next game? (e.g., "I blocked out well", "I saw the ball at all times", etc.)	5.5 (2.46)
4. Communicating with your coach? (e.g., "What can I improve upon?" "What did I do right or wrong?", etc.)	6.3 (1.7)
5. Learning from your mistakes in order to improve? (e.g., "I will fill the lane harder next time", "I will follow through on my shot more", etc.)	5.9 (1.2)
<u>Additional Concerns about Games</u>	

PRACTICES	
Would you say that, at practices, you need to improve at:	
1. Setting specific physical, technical, tactical, and mental goals for every practice?	5.6 (2.27)
2. Keeping a written record of progress in meeting your goals?	4.7 (2.54)
3. Arriving at practice totally committed to do your best?	5.3 (2.16)
4. Maintaining your concentration, especially when practice gets long, repetitive, or uninteresting?	7.2 (1.23)
5. Maintaining your effort and focus, especially when you are tired or don't feel like being there?	6.1 (2.64)

Definitely Not					Sometimes or to Some Extent				Definitely Yes
1	2	3	4	5	6	7	8	9	

<p>6. Making better use of full practice time? <i>(e.g., shooting between drills, ball handling if you're subbed off, etc.)</i></p>	5.8 (1.48)
<p>7. Staying positive when you're having a bad practice?</p>	6.4 (1.51)
<p>8. Remaining positive when an injury forces you to stop training?</p>	6.33 (3.0)
<p>9. Improving your consistency and fine tuning the skills you can already perform, rather than just going through the motions? <i>(e.g., making sure your crossover dribble is low & fast, etc.)</i></p>	4.9 (1.79)
<p>10. Working more on skill deficiencies?</p>	6.0 (2.11)
<p>11. Practicing mental skills, as well as physical skills?</p>	6.5 (1.72)
<p>12. Forgetting about what other players are doing, or how much playing time they are getting? <i>(i.e., concentrating on what <u>you</u> have to do to improve)</i></p>	5.3 (1.70)
<p>13. Using key words and self-talk to improve your skills? <i>(e.g., "See the ball", "Follow through", etc.)</i></p>	4.8 (1.62)
<p>14. Making better use of visualization/mental rehearsal to improve skills?</p>	5.1 (1.91)
<p>15. Giving 100% effort and concentration to the task at hand, in order to have quality practices? <i>(e.g., if ball handling, do it accurately and precisely, etc.)</i></p>	5.8 (2.04)
<p>16. Doing serious game simulations, and making them as realistic as possible? <i>(e.g., visualizing what the defence does when you headfake and adjusting your move accordingly, etc.)</i></p>	5.0 (1.89)
<p>17. Using mental imagery, self-talk, and key words before and during game simulations?</p>	5.4 (1.58)
<p><u>Additional Concerns about Practices</u></p> <hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> <hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> <hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/>	

Appendix B

Means (and standard deviations) of the retest sport specific questionnaires for volleyball and running

The retest sport specific questionnaires for athletes contain the means (and standard deviations), across all athletes in that sport, for each column. The standard deviation is the number which is in 'parentheses'.

Name: _____

Date: _____

SPORT PSYCHOLOGY QUESTIONNAIRE FOR VOLLEYBALL PLAYERS

This questionnaire was designed to help you to identify areas for mental skills training at practices and competitions in which players need to improve, and for which they might need help from a sport psychologist to achieve that improvement. Please answer each question honestly. All information will be kept confidential.

For each question, write in the number that best expresses your reaction in terms of the following scale:

Definitely Not				Sometimes or to Some Extent				Definitely Yes
1	2	3	4	5	6	7	8	9

MATCHES	Is this something you need to improve on?
Would you say that, just before or during a match, you need to improve at:	
1. Thinking positive thoughts? (e.g., "I'm going to kill this one", "This take is going right to the setter", etc.)	5.23 (2.46)
2. Tuning out negative thoughts? (e.g., "I hope they don't serve to me", etc.)	4.83 (2.48)
3. Staying relaxed and not getting too nervous: a) just before the game? b) in pressure situations?	4.31 (1.83)
4. Maintaining/regaining your confidence in difficult situations? (e.g., when you shank a ball out of bounds, you get stuffed, you aren't getting any sets, you carry a ball, etc.)	5.57 (2.19)
5. Maintaining your concentration on the task at hand? (e.g., seeing the ball leave your arms when you receive the serve, etc.)	4.49 (2.01)
6. Blocking out distractors over which you have no control? (e.g., who you are playing against, who is hitting the ball when you are blocking or in the back row, the size of the opponents, the height of the roof, noisy fans, etc.)	4.14 (2.09)
7. Blocking out what other people might say if you lose or don't perform well? (e.g., comments from parent(s), coach, teammates, friends, other players, spectators) Other? _____	4.31 (2.25)
8. Blocking out distractors that don't involve volleyball? (e.g., family, school, relationship problems) Other? _____	3.79 (2.24)
9. Refocusing after you get distracted for any reason? (e.g., if the referee blows a call, you hit the first few balls out of bounds, players are trash talking, etc.)	4.84 (2.40)
10. Staying energized in difficult situations? (e.g., when you feel tired or sore, you have a bad warmup, nothing else is going right, etc.)	5.23 (2.26)
11. Communicating tactically with teammates? (e.g., "Two hitters in the back row", "You take long", "I've got it", etc.)	4.63 (2.47)

Definitely Not 1 2 3 4 Sometimes or to Some Extent 5 6 7 8 9 Definitely Yes

	Is this something you need to improve on?
12. Identifying and reacting to your opponents' weaknesses, and making adjustments as the game progresses? (e.g., tip if the middle is open, hit off/around the block if there are two blockers, etc.)	4.97 (2.28)
13. Being assertive when the opportunity presents itself? (e.g., you kill the ball if there is one blocker, etc.)	3.94 (2.24)
14. Managing troublesome emotions? (e.g., excitement, anger, disappointment, etc.)	4.37 (2.0)
15. Giving 100% effort when there are excuses not to? (e.g., you are playing a team you have played often, you are losing by a large margin, etc.)	5.0 (2.62)
16. Setting challenging yet attainable goals for each match?	4.83 (2.26)
17. Having a better health management plan before and during each match/tournament? (e.g., getting enough sleep, drinking enough water, eating properly, etc.)	4.64 (2.09)
18. Preparing and following a detailed precompetition and competition plan?	4.31 (2.72)
19. Communicating your precompetition needs to others? (e.g., parent(s), coach, teammates, friends, etc.)	4.01 (2.21)
20. Staying supportive of and praising teammates' performance? (e.g., "Good set", "Great hit", "Good take", etc.)	3.93 (2.22)
IMMEDIATELY AFTER A MATCH	
Would you say that you need to improve at:	
1. Evaluating your mental preparation and playing performance for that match?	4.8 (2.27)
2. Putting aside a poor performance and focusing on the next match?	4.99 (2.38)
3. Remembering the good things that happened, so that you can incorporate them into mental preparation for the next match?	4.97 (2.31)
4. Communicating with your coach? (e.g., "What can I improve upon?", "What did I do right or wrong?", etc.)	5.16 (2.30)
5. Learning from your mistakes so that you can improve? (e.g., "I will absorb the ball more on serve reception", "I will use more backsets", etc.)	4.51 (2.35)
Additional Concerns about Games or Matches	

Definitely
Not

Sometimes or
to Some Extent

Definitely
Yes

1 2 3 4 5 6 7 8 9

PRACTICES	Is this something you need to improve on?
Would you say that, at practices, you need to improve at:	
1. Setting specific physical, technical, tactical, and mental goals for every practice?	5.31 (1.71)
2. Keeping a written record of progress in meeting your goals?	5.97 (2.87)
3. Arriving at each practice totally committed to doing your best?	4.34 (2.17)
4. Maintaining your concentration, especially when practice is long, repetitive, or uninteresting?	5.43 (2.34)
5. Maintaining your effort and focus, especially when you're tired, or don't feel like being there?	5.37 (2.30)
6. Making better use of the full practice time? (e.g., volley against the wall between drills, practice your arm action when waiting in line to hit, etc.)	4.38 (2.26)
7. Staying positive when a practice doesn't go well?	5.40 (1.93)
8. Remaining positive when an injury forces you to stop training?	4.51 (2.49)
9. Improving your consistency and fine tuning the skills you can already perform rather than just going through the motions? (e.g., concentrate on your follow through when you are hitting at practices, etc.)	4.8 (1.98)
10. Working more on skill deficiencies?	4.93 (2.20)
11. Practicing mental skills, as well as physical skills?	5.11 (2.14)
12. Not worrying about what other players are doing or how much playing time they are getting? (i.e., concentrating on what <u>you</u> have to do to improve)	4.31 (2.71)
13. Using key words and self-talk to improve your skills? (e.g., "Watch the ball", "Follow-through", etc.)	3.91 (2.06)
14. Making better use of visualization/mental rehearsal to improve skills?	4.97 (2.11)
15. Giving 100% effort and concentration to the task at hand, in order to have quality practices?	4.69 (2.34)
16. Doing serious game simulations, and making them as realistic as possible? (e.g., diving for all balls, pretending you're going around a block, etc.)	4.57 (2.40)
17. Using mental imagery, key words, and self-talk before and during game simulations?	4.51 (2.06)
<u>Additional Concerns about Practices</u>	

Name: _____

Date: _____

Race: _____

SPORT PSYCHOLOGY QUESTIONNAIRE FOR RUNNERS
(Middle Distance and Distance)

This questionnaire was designed to help you to identify areas for mental skills training at practices and competitions in which runners need to improve, and for which they might need help from a sport psychologist to achieve that improvement. Please answer each question honestly. All information will be kept confidential.

For each question, write in the number that best expresses your reaction in terms of the following scale:

Definitely Not				Sometimes or to Some Extent				Definitely Yes
1	2	3	4	5	6	7	8	9

COMPETITION	Is this something you need to improve on?
Would you say that, just before or during a meet, you need to improve at:	
1. Thinking positive thoughts? (e.g., "I know I can hit the splits I'm going for", "I'm going for a personal best", etc.)	5.05 (1.53)
2. Tuning out negative thoughts? (e.g., "I hope I don't come in last", "These runners are really fast", etc.)	5.17 (1.77)
3. Staying relaxed and not getting too nervous: a) just before a race? b) in pressure situations?	5.44 (1.80)
4. Maintaining/regaining your confidence in difficult situations? (e.g., you have a bad start/split, you're behind, you feel really nervous, etc.)	5.62 (1.71)
5. Maintaining your concentration during a race? (e.g., focusing on form/technique, concentrating on race strategy, etc.)	4.52 (1.77)
6. Blocking out distractors over which you have no control? (e.g., the time of day of your race, who you're competing against, etc.)	4.67 (1.91)
7. Blocking out what people might say if you don't perform well? (e.g., comments from your parents, coach, friends, or spectators) Other? _____	4.67 (2.55)
8. Blocking out distractors that don't involve running? (e.g., school, family, or relationship problems) Other? _____	4.44 (2.32)
9. Refocusing after you get distracted for any reason? (e.g., while waiting during the heat before yours, a competitor invades your space, etc.)	4.95 (1.58)
10. Staying energized and mentally ready in difficult situations? (e.g., when you feel fatigued or ill, your opponents have much faster qualifying times, etc.)	5.97 (1.85)
11. Communicating with your coach before the race? (e.g., specific things on which you need to focus during the race, etc.)	4.33 (2.02)

Definitely Not 1 2 3 4 5 6 7 8 9 Definitely Yes

Sometimes or to Some Extent

	Is this something you need to improve on?
12. Making adjustments as the race progresses? (e.g., dealing with an opponent's tactics, etc.)	5.14 (1.73)
13. Managing troublesome emotions? (e.g., excitement, anger, disappointment, etc.)	5.0 (2.13)
14. Being assertive and inserting some pace when the opportunity presents itself? (e.g., a tired opponent, near the end of a race, a predetermined kick point, etc.)	4.71 (2.0)
15. Giving 100% effort when there are excuses not to? (e.g., you are running against people you have run against several times, you are placing poorly in a race, you begin to feel fatigued, etc.)	5.26 (2.51)
16. Setting challenging yet attainable goals for each race?	4.31 (2.16)
17. Having a better health management plan before and during a meet? (e.g., getting enough sleep, drinking enough water, eating properly, etc.)	4.61 (2.23)
18. Preparing and following a detailed precompetition and competition plan?	4.76 (2.05)
19. Communicating your precompetition needs to others? (e.g., parent(s), coach, teammates, and friends, etc.)	4.33 (2.06)
20. Staying supportive of and praising teammates' performance?	3.21 (1.87)
IMMEDIATELY AFTER A MEET	
Would you say that you need to improve at:	
1. Evaluating your mental preparation and running performance for that meet?	4.74 (2.08)
2. Putting aside a poor performance and focusing on the next competition/race?	5.0 (2.16)
3. Remembering the good things that happened, and incorporating them into mental preparation for the next competition/race?	4.59 (1.85)
4. Communicating with your coach? (e.g., "How was my form?", "My strategy?", etc.)	4.14 (2.08)
5. Learning from your mistakes so that you can improve? (e.g., "Stay in good position off the turn", etc.)	4.29 (2.19)

Definitely
Not

Sometimes or
to Some Extent

Definitely
Yes

1 2 3 4 5 6 7 8 9

TRAINING	Is this something you need to improve on?
Would you say that, during training, you need to improve at:	
1. Setting specific physical, technical, tactical, and mental goals for every practice?	5.33 (2.09)
2. Keeping a written record of progress in meeting your goals?	5.09 (2.76)
3. Arriving at practice physically and mentally committed to doing your best?	5.14 (2.36)
4. Maintaining your concentration, especially when practice gets long, repetitive, or uninteresting?	5.14 (2.18)
5. Maintaining your effort and intensity, especially when you are tired or don't feel like being there?	5.76 (2.18)
6. Making better use of full practice time? (<i>e.g., run all intervals at the set time, mentally rehearse between intervals, etc.</i>)	4.93 (2.29)
7. Staying positive when you're having a bad practice?	5.83 (1.9)
8. Remaining positive when an injury forces you to stop training?	5.68 (2.16)
9. Constantly working on improving your technique, strength, or speed? (<i>i.e., not just going through the motions</i>)	5.62 (2.19)
10. Trying new and challenging skills? (<i>e.g., trying to perfect a new racing strategy, etc.</i>)	5.23 (2.0)
11. Practicing mental skills, as well as physical skills?	5.43 (2.03)
12. Not worrying about what other runners are doing? (<i>i.e., concentrating on what <u>you</u> have to do to improve</i>)	5.36 (2.26)
13. Using key words and self-talk to improve your running? (<i>e.g., "Stay loose", "Drive my arms", "Relax and run faster", etc.</i>)	4.62 (1.82)
14. Making better use of visualization/mental rehearsal before practices to improve your skills?	5.17 (2.07)
15. Giving 100% concentration to the task at hand, in order to have quality practices?	5.19 (2.16)
16. Doing serious race simulations during some practices? (<i>e.g., use a start gun, time your splits, run against other club members, wear competitive suits, etc.</i>)	5.24 (2.21)

Definitely
Not

Sometimes or
to Some Extent

Definitely
Yes

1 2 3 4 5 6 7 8 9

17. Using self-talk, key words, and imagery before and during race simulations?	4.95 (2.02)
<u>Additional Concerns about Training</u> <hr/> <hr/> <hr/> <hr/>	

Appendix C

Mean (and standard deviation) of the sport specific questionnaires for volleyball, running, swimmers, and basketball coaches

The sport specific questionnaires contain the mean (and standard deviation), across all coaches in that sport, for each column. The standard deviation is the number which is in 'parentheses'.

SPORT PSYCHOLOGY QUESTIONNAIRE FOR VOLLEYBALL COACHES

This questionnaire was designed to help identify areas for mental skills training at practices and competitions in which players need to improve, and for which they might need help from a sport psychologist to achieve that improvement. Please answer each question as best as you are able. All information will be kept confidential.

For each question, write in the number that best expresses your reaction in terms of the following scale:

Definitely Not					Sometimes or to Some Extent					Definitely Yes
1	2	3	4	5	6	7	8	9		9

MATCHES	Is this item important for volleyball players?	Is this something that most players need to improve on?	Is this something that this athlete needs to improve on?	Do you think this athlete would benefit from working with a sport psychologist in this area?	Are you confident in your ability to answer this question?
Would you say that, just before or during a match, this player needs to improve at:					
1. Thinking positive thoughts? (e.g., "I'm going to kill this one", "This take is going right to the setter", etc.)	7.5 (1.91)	6.0 (1.83)	5.22 (2.05)	5.11 (2.35)	8.83 (0.51)
2. Tuning out negative thoughts? (e.g., "I hope they don't serve to me", etc.)	6.25 (3.20)	5.5 (1.73)	4.56 (1.79)	5.29 (2.34)	8.39 (1.2)
3. Staying relaxed and not getting too nervous: a) just before the game? b) in pressure situations?	8.0 (2.0)	5.75 (2.22)	4.94 (2.04)	5.78 (2.13)	8.72 (0.96)
4. Maintaining/regaining their confidence in difficult situations? (e.g., when they shank a ball out of bounds, they get stuffed, they aren't getting any sets, they carry a ball, etc.)	8.25 (1.50)	5.75 (1.5)	5.44 (2.23)	5.39 (2.43)	8.5 (0.79)
5. Maintaining their concentration on the task at hand? (e.g., seeing the ball leave their arms when they receive the serve, etc.)	8.0 (2.0)	5.75 (1.5)	5.0 (2.22)	5.72 (2.19)	8.83 (0.51)
6. Blocking out distractors over which they have no control? (e.g., who they are playing against, who is hitting the ball when they are blocking or in the back row, the size of the opponents, the height of the roof, noisy fans, etc.)	7.0 (2.83)	5.25 (0.96)	4.11 (2.61)	5.06 (3.28)	8.33 (1.41)
7. Blocking out what other people might say if they lose or don't perform well? (e.g., comments from parent(s), coach, teammates, friends, other players, spectators) Other? _____	6.25 (2.63)	5.25 (1.26)	3.67 (2.0)	4.72 (3.1)	8.56 (1.65)
8. Blocking out distractors that don't involve volleyball? (e.g., family, school, relationship problems) Other? _____	6.0 (2.16)	5.25 (1.71)	3.56 (2.26)	4.44 (3.05)	8.17 (1.86)

**Definitely
Not**

**Sometimes or
to Some Extent**

**Definitely
Yes**

1 2 3 4 5 6 7 8 9

<p>MATCHES (cont'd)</p>	<p>Is this item important for volleyball players?</p>	<p>Is this something that most players need to improve on?</p>	<p>Is this something that this athlete needs to improve on?</p>	<p>Do you think this athlete would benefit from working with a sport psychologist in this area?</p>	<p>Are you confident in your ability to answer this question?</p>
<p>9. Refocusing after they get distracted for any reason? (e.g., if the referee blows a call, they hit the first few balls out of bounds, players are trash talking, etc.)</p>	<p>7.5 (2.38)</p>	<p>5.75 (2.5)</p>	<p>4.72 (2.63)</p>	<p>4.83 (3.17)</p>	<p>8.94 (0.24)</p>
<p>10. Staying energized in difficult situations? (e.g., when they feel tired or sore, they have a bad warmup, nothing else is going right, etc.)</p>	<p>8.0 (2.0)</p>	<p>6.5 (2.38)</p>	<p>4.89 (2.47)</p>	<p>4.83 (2.77)</p>	<p>8.61 (0.50)</p>
<p>11. Communicating tactically with teammates? (e.g., "Two hitters in the back row", "You take long", "I've got it", etc.)</p>	<p>8.25 (1.5)</p>	<p>6.0 (2.58)</p>	<p>4.94 (3.17)</p>	<p>4.39 (2.91)</p>	<p>8.61 (1.42)</p>
<p>12. Identifying and reacting to their opponents' weaknesses, and making adjustments as the game progresses? (e.g., tip if the middle is open, hit off/around the block if there are two blockers, etc.)</p>	<p>8.25 (1.5)</p>	<p>6.75 (1.71)</p>	<p>5.17 (2.9)</p>	<p>5.11 (2.37)</p>	<p>8.67 (1.19)</p>
<p>13. Being assertive when the opportunity presents itself? (e.g., they kill the ball if there is one blocker, etc.)</p>	<p>8.25 (1.5)</p>	<p>6.0 (1.15)</p>	<p>4.28 (2.61)</p>	<p>4.5 (2.68)</p>	<p>8.56 (0.62)</p>
<p>14. Managing troublesome emotions? (e.g., excitement, anger, disappointment, etc.)</p>	<p>7.25 (2.06)</p>	<p>5.75 (1.71)</p>	<p>4.11 (2.22)</p>	<p>4.72 (2.63)</p>	<p>8.67 (1.19)</p>
<p>15. Giving 100% effort when there are excuses not to? (e.g., they are playing a team they have played often, they are losing by a large margin, etc.)</p>	<p>8.0 (1.15)</p>	<p>6.5 (1.29)</p>	<p>4.33 (2.3)</p>	<p>5.06 (2.78)</p>	<p>8.78 (0.73)</p>
<p>16. Setting challenging yet attainable goals for each match?</p>	<p>6.75 (2.22)</p>	<p>5.5 (2.08)</p>	<p>4.11 (3.01)</p>	<p>5.39 (2.15)</p>	<p>6.89 (2.76)</p>
<p>17. Having a better health management plan before and during each match/tournament? (e.g., getting enough sleep, drinking enough water, eating properly, etc.)</p>	<p>7.25 (2.06)</p>	<p>6.25 (1.89)</p>	<p>3.39 (2.38)</p>	<p>4.28 (2.89)</p>	<p>7.81 (1.51)</p>
<p>18. Preparing and following a detailed precompetition and competition plan?</p>	<p>6.75 (1.71)</p>	<p>5.25 (1.26)</p>	<p>5.17 (1.92)</p>	<p>5.61 (1.94)</p>	<p>7.83 (1.62)</p>
<p>19. Communicating their precompetition needs to others? (e.g., parent(s), coach, teammates, friends, etc.)</p>	<p>7.25 (2.06)</p>	<p>4.5 (1.0)</p>	<p>3.28 (1.71)</p>	<p>5.44 (1.95)</p>	<p>7.44 (1.72)</p>
<p>20. Staying supportive of and praising teammates' performance? (e.g., "Good set", "Great hit", "Good take", etc.)</p>	<p>8.25 (1.5)</p>	<p>6.25 (2.75)</p>	<p>3.56 (2.38)</p>	<p>4.61 (2.55)</p>	<p>8.56 (0.62)</p>

**Definitely
Not**

**Sometimes or
to Some Extent**

**Definitely
Yes**

1 2 3 4 5 6 7 8 9

<p>IMMEDIATELY AFTER A MATCH</p> <p>Would you say that this player needs to improve at:</p>	<p>Is this item important for volleyball players?</p>	<p>Is this something that most players need to improve on?</p>	<p>Is this something that this athlete needs to improve on?</p>	<p>Do you think this athlete would benefit from working with a sport psychologist in this area?</p>	<p>Are you confident in your ability to answer this question?</p>
<p>1. Evaluating their mental preparation and playing performance for that match?</p>	<p>7.75 (1.5)</p>	<p>6.75 (1.71)</p>	<p>5.72 (1.53)</p>	<p>5.22 (2.18)</p>	<p>8.33 (0.97)</p>
<p>2. Putting aside a poor performance and focusing on the next match?</p>	<p>8.25 (1.5)</p>	<p>6.75 (1.71)</p>	<p>5.06 (2.24)</p>	<p>5.56 (2.18)</p>	<p>8.39 (0.92)</p>
<p>3. Remembering the good things that happened, so that they can incorporate them into mental preparation for the next match?</p>	<p>8.25 (1.5)</p>	<p>6.25 (1.5)</p>	<p>4.39 (2.12)</p>	<p>4.94 (2.1)</p>	<p>8.44 (0.92)</p>
<p>4. Communicating with you, their coach? (e.g., "What can I improve upon?", "What did I do right or wrong?", etc.)</p>	<p>7.0 (1.83)</p>	<p>6.25 (1.5)</p>	<p>4.22 (2.26)</p>	<p>4.44 (2.5)</p>	<p>8.39 (1.42)</p>
<p>5. Learning from their mistakes so that they can improve? (e.g., "I will absorb the ball more on serve reception", "I will use more backsets", etc.)</p>	<p>7.25 (2.06)</p>	<p>6.25 (1.5)</p>	<p>4.67 (1.91)</p>	<p>5.44 (2.12)</p>	<p>8.56 (0.78)</p>
<p><u>Additional Concerns about Games or Matches</u></p> <hr/> <hr/> <hr/> <hr/>					
<p>PRACTICES</p>					
<p>Would you say that, at practices, this athlete needs to improve at:</p>					
<p>1. Setting specific physical, technical, tactical, and mental goals for every practice?</p>	<p>7.5 (1.29)</p>	<p>6.25 (1.5)</p>	<p>5.11 (2.03)</p>	<p>5.56 (2.18)</p>	<p>8.17 (1.38)</p>
<p>2. Keeping a written record of progress in meeting their goals?</p>	<p>7.75 (2.5)</p>	<p>6.25 (2.75)</p>	<p>5.78 (2.24)</p>	<p>5.17 (2.36)</p>	<p>8.28 (1.07)</p>
<p>3. Arriving at each practice totally committed to doing their best?</p>	<p>7.75 (1.89)</p>	<p>7.25 (1.71)</p>	<p>4.0 (2.17)</p>	<p>4.94 (2.69)</p>	<p>8.89 (0.47)</p>
<p>4. Maintaining their concentration, especially when practice is long, repetitive, or uninteresting?</p>	<p>7.75 (1.89)</p>	<p>6.25 (1.5)</p>	<p>5.44 (2.38)</p>	<p>4.83 (2.68)</p>	<p>8.94 (0.24)</p>
<p>5. Maintaining their effort and focus, especially when they're tired, or don't feel like being there?</p>	<p>7.5 (1.91)</p>	<p>6.5 (1.91)</p>	<p>5.67 (2.2)</p>	<p>4.89 (2.76)</p>	<p>8.56 (1.89)</p>

Definitely
Not

Sometimes or
to Some Extent

Definitely
Yes

1 2 3 4 5 6 7 8 9

PRACTICES (cont'd)	Is this item important for volleyball players?	Is this something that most players need to improve on?	Is this something that this athlete needs to improve on?	Do you think this athlete would benefit from working with a sport psychologist in this area?	Are you confident in your ability to answer this question?
6. Making better use of the full practice time? (e.g., volley against the wall between drills, practice arm action when waiting in line to hit, etc.)	6.25 (1.89)	4.25 (1.5)	3.44 (2.41)	3.5 (2.71)	8.56 (1.89)
7. Staying positive when a practice doesn't go well?	6.75 (1.71)	5.25 (2.06)	4.28 (1.84)	3.5 (2.6)	8.67 (1.41)
8. Remaining positive when an injury forces them to stop training?	7.25 (1.5)	6.25 (1.5)	3.94 (2.04)	3.72 (2.24)	7.22 (2.96)
9. Improving their consistency and fine tuning the skills they can already perform rather than just going through the motions? (e.g., concentrate on their follow through when they are hitting at practices, etc.)	7.75 (1.5)	7.0 (2.31)	4.94 (2.44)	3.56 (2.57)	8.89 (0.47)
10. Working more on skill deficiencies?	7.25 (1.26)	6.0 (0.62)	4.61 (2.17)	3.67 (2.25)	8.56 (1.89)
11. Practicing mental skills, as well as physical skills?	7.0 (1.41)	6.25 (0.96)	5.44 (1.15)	4.83 (2.26)	6.72 (2.95)
12. Not worrying about what other players are doing or how much playing time they are getting? (i.e., concentrating on what they have to do to improve)	6.75 (2.87)	6.25 (2.06)	3.0 (2.11)	3.89 (2.83)	8.17 (1.1)
13. Using key words and self-talk to improve their skills? (e.g., "Watch the ball", "Follow-through", etc.)	8.0 (1.41)	6.0 (1.83)	3.44 (2.48)	4.28 (2.65)	9.0 (0)
14. Making better use of visualization/mental rehearsal to improve skills?	7.0 (1.63)	6.25 (0.96)	4.06 (1.30)	4.78 (1.93)	7.78 (1.56)
15. Giving 100% effort and concentration to the task at hand, in order to have quality practices?	8.75 (0.50)	6.75 (1.26)	4.11 (1.6)	4.22 (2.32)	8.94 (0.24)
16. Doing serious game simulations, and making them as realistic as possible? (e.g., diving for all balls, pretending they're going around a block, etc.)	8.25 (0.96)	5.0 (2.16)	4.72 (1.74)	4.67 (2.66)	8.67 (1.41)
17. Using mental imagery, key words, and self-talk before and during game simulations?	7.50 (1.91)	5.5 (0.58)	4.22 (2.02)	5.17 (2.04)	7.56 (2.26)

Athlete: _____ Race: _____ Date: _____ Coach: _____

SPORT PSYCHOLOGY QUESTIONNAIRE FOR RUNNING COACHES
(Middle Distance and Distance)

This questionnaire was designed to help identify areas for mental skills training at practices and competitions in which runners need to improve, and for which they might need help from a sport psychologist to achieve that improvement. Please answer each question as best as you are able. All information will be kept confidential.

For each question, write in the number that best expresses your reaction in terms of the following scale:

Definitely Not 1 2 3 4 Sometimes or to Some Extent 5 6 7 8 Definitely Yes 9

COMPETITION	Is this item important for runners?	Is this something that most runners need to improve on?	Is this something that this athlete needs to improve on?	Do you think this athlete would benefit from working with a sport psychologist in this area?	Are you confident in your ability to answer this question?
Would you say that, just before or during a meet, this runner needs to improve at:					
1. Thinking positive thoughts? (e.g., "I know I can hit the splits I'm going for", "I'm going for a personal best", etc.)	8.33 (0.58)	5.67 (2.31)	3.85 (1.87)	4.8 (2.44)	7.1 (2.22)
2. Tuning out negative thoughts? (e.g., "I hope I don't come in last", "These runners are really fast", etc.)	8.67 (0.58)	6.67 (2.08)	4.05 (1.76)	4.8 (2.24)	7.1 (2.22)
3. Staying relaxed and not getting too nervous: a) just before a race? b) in pressure situations?	6.33 (3.79)	5.67 (2.52)	3.7 (2.0)	3.85 (1.98)	6.85 (2.18)
4. Maintaining/regaining their confidence in difficult situations? (e.g., they have a bad start/split, they're behind, they feel really nervous, etc.)	6.67 (3.21)	5.33 (3.06)	4.1 (1.8)	4.5 (1.57)	7.15 (2.25)
5. Maintaining their concentration during a race? (e.g., focusing on form/technique, concentrating on race strategy, etc.)	7.33 (2.08)	6.0 (1.73)	4.35 (1.66)	4.45 (1.5)	7.0 (2.15)
6. Blocking out distractors over which they have no control? (e.g., the time of day of their race, who they're competing against, etc.)	6.33 (3.79)	5.0 (2.65)	3.5 (1.5)	3.3 (1.38)	6.2 (2.48)
7. Blocking out what people might say if they don't perform well? (e.g., comments from parent(s), coach, friends, or spectators) Other? _____	6.33 (3.06)	4.67 (2.08)	3.3 (1.42)	2.95 (1.61)	5.95 (2.54)
8. Blocking out distractors that don't involve running? (e.g., school, family, or relationship problems) Other? _____	6.33 (3.06)	4.33 (1.53)	3.15 (1.5)	2.95 (1.67)	7.15 (2.25)
9. Refocusing after they get distracted for any reason? (e.g., while waiting during the heat before theirs, a competitor invades their space, etc.)	6.33 (3.06)	5.33 (2.52)	3.45 (1.39)	3.1 (1.21)	6.95 (2.11)

Definitely
Not

Sometimes or
to Some Extent

Definitely
Yes

1 2 3 4 5 6 7 8 9

COMPETITION (cont'd)	Is this item important for runners?	Is this something that most runners need to improve on?	Is this something that this athlete needs to improve on?	Do you think this athlete would benefit from working with a sport psychologist in this area?	Are you confident in your ability to answer this question?
10. Staying energized and mentally ready in difficult situations? <i>(e.g., when they feel fatigued or ill, your opponents have much faster qualifying times, etc.)</i>	7.67 (1.15)	7.0 (1.0)	3.35 (1.46)	3.35 (1.76)	6.95 (2.11)
11. Communicating with you, their coach, before the race? <i>(e.g., specific things on which they need to focus during the race, etc.)</i>	7.33 (2.08)	5.67 (0.58)	2.8 (1.11)	2.3 (0.86)	6.95 (2.11)
12. Making adjustments as the race progresses? <i>(e.g., dealing with an opponent's tactics, etc.)</i>	8.0 (1.73)	6.33 (1.15)	3.3 (1.75)	3.45 (1.79)	6.95 (2.11)
13. Managing troublesome emotions? <i>(e.g., excitement, anger, disappointment, etc.)</i>	6.67 (2.08)	6.33 (0.58)	3.75 (1.52)	3.75 (1.62)	6.4 (2.06)
14. Being assertive and inserting some pace when the opportunity presents itself? <i>(e.g., a tired opponent, near the end of a race, a predetermined kick point, etc.)</i>	7.0 (2.0)	5.67 (1.15)	3.68 (1.97)	3.47 (1.98)	6.58 (2.14)
15. Giving 100% effort when there are excuses not to? <i>(e.g., they are running against people they have run against several times, they are placing poorly in a race, they begin to feel fatigued, etc.)</i>	7.0 (2.0)	7.0 (1.73)	4.4 (2.39)	4.35 (2.00)	6.7 (2.03)
16. Setting challenging yet attainable goals for each race?	8.33 (1.15)	5.0 (0)	3.3 (1.38)	3.4 (1.57)	6.7 (2.03)
17. Having a better health management plan before and during a meet? <i>(e.g., getting enough sleep, drinking enough water, eating properly, etc.)</i>	6.33 (3.79)	5.67 (3.21)	3.35 (2.03)	3.2 (1.61)	7.1 (2.25)
18. Preparing and following a detailed precompetition and competition plan?	5.0 (3.0)	4.67 (3.06)	2.75 (1.29)	2.5 (1.05)	7.15 (2.25)
19. Communicating their precompetition needs to others? <i>(e.g., parent(s), coach, teammates, and friends, etc.)</i>	5.33 (3.79)	4.67 (3.21)	2.85 (1.18)	2.6 (0.68)	7.15 (2.25)
20. Staying supportive of and praising teammates' performance?	5.33 (4.04)	3.33 (2.08)	2.55 (1.28)	2.25 (0.55)	7.15 (2.25)

Definitely
Not

Sometimes or
to Some Extent

Definitely
Yes

1 2 3 4 5 6 7 8 9

IMMEDIATELY AFTER A MEET					
Would you say that this runner needs to improve at:	Is this item important for runners?	Is this something that most runners need to improve on?	Is this something that this athlete needs to improve on?	Do you think this athlete would benefit from working with a sport psychologist in this area?	Are you confident in your ability to answer this question?
1. Evaluating their mental preparation and running performance for that meet?	6.0 (4.36)	4.67 (3.21)	2.7 (1.38)	2.45 (1.1)	7.2 (2.29)
2. Putting aside a poor performance and focusing on the next competition/race?	6.67 (3.21)	6.33 (2.89)	3.65 (1.87)	4.05 (2.01)	7.15 (2.25)
3. Remembering the good things that happened, and incorporating them into mental preparation for the next competition/race?	6.33 (3.79)	5.33 (2.89)	3.3 (1.52)	3.45 (1.67)	7.2 (2.29)
4. Communicating with you, their coach? (e.g., "How was my form?", "My strategy?")	6.0 (3.61)	4.67 (2.31)	2.8 (1.06)	2.5 (0.83)	7.2 (2.29)
5. Learning from their mistakes so that they can improve? (e.g., "Stay in good position off the turn", etc.)	6.33 (3.79)	5.0 (2.65)	3.55 (1.39)	3.5 (1.43)	7.15 (2.25)
Additional Concerns about Races					
TRAINING					
Would you say that, during training, this runner needs to improve at:					
1. Setting specific physical, technical, tactical, and mental goals for every practice?	7.33 (1.53)	6.33 (1.15)	4.5 (2.37)	3.85 (1.84)	7.0 (2.15)
2. Keeping a written record of progress in meeting their goals?	6.67 (1.15)	7.67 (1.15)	4.8 (2.14)	4.3 (2.08)	7.0 (2.15)
3. Arriving at practice physically and mentally committed to doing their best?	7.67 (1.53)	5.67 (1.53)	3.85 (2.18)	4.1 (2.2)	7.0 (2.15)
4. Maintaining their concentration, especially when practice gets long, repetitive, or uninteresting?	8.0 (1.73)	6.67 (0.58)	4.3 (2.39)	4.3 (2.18)	7.05 (2.19)
5. Maintaining their effort and intensity, especially when they are tired or don't feel like being there?	8.33 (1.15)	6.67 (0.58)	4.15 (2.46)	4.3 (2.39)	7.15 (2.25)
6. Making better use of full practice time? (e.g., run all intervals at the set time, mentally rehearse between intervals, etc.)	8.0 (1.0)	6.0 (1.73)	3.75 (2.29)	3.75 (2.31)	7.0 (2.15)

Definitely
Not

Sometimes or
to Some Extent

Definitely
Yes

1 2 3 4 5 6 7 8 9

TRAINING (cont'd)	Is this item important for runners?	Is this something that most runners need to improve on?	Is this something that this athlete needs to improve on?	Do you think this athlete would benefit from working with a sport psychologist in this area?	Are you confident in your ability to answer this question?
7. Staying positive when they're having a bad practice?	7.33 (2.08)	7.0 (2.0)	4.35 (1.66)	4.6 (1.47)	6.9 (2.1)
8. Remaining positive when an injury forces them to stop training?	7.67 (2.31)	7.33 (2.08)	4.1 (1.8)	4.4 (1.43)	6.9 (2.1)
9. Constantly working on improving their technique, strength, or speed? (i.e., not just going through the motions)	6.33 (3.79)	5.0 (2.65)	3.2 (1.88)	3.05 (1.54)	6.9 (2.1)
10. Trying new and challenging skills? (e.g., trying to perfect a new racing strategy, etc.)	7.0 (2.0)	6.0 (1.0)	3.1 (1.65)	3.75 (1.41)	6.6 (2.06)
11. Practicing mental skills, as well as physical skills?	7.67 (1.53)	7.33 (0.58)	4.3 (2.08)	4.8 (2.17)	6.9 (2.1)
12. Not worrying about what other runners are doing? (i.e., concentrating on what <u>they</u> have to do to improve)	8.33 (0.58)	8.33 (0.58)	4.25 (2.2)	4.55 (2.14)	6.8 (2.09)
13. Using key words and self-talk to improve their running? (e.g., "Stay loose", "Drive my arms", "Relax and run faster", etc.)	7.33 (2.08)	6.33 (1.15)	3.75 (1.59)	3.55 (1.36)	6.5 (2.09)
14. Making better use of visualization/mental rehearsal before practices to improve their skills?	7.0 (2.0)	6.67 (1.53)	4.2 (1.54)	4.15 (1.23)	6.35 (2.16)
15. Giving 100% concentration to the task at hand, in order to have quality practices?	6.33 (3.79)	4.67 (2.31)	3.1 (1.65)	2.8 (1.67)	6.15 (2.32)
16. Doing serious race simulations during some practices? (e.g., use a start gun, time their splits, run against other club members, wear competitive suits, etc.)	8.0 (1.0)	7.0 (1.0)	4.0 (2.32)	4.0 (2.47)	7.15 (2.25)
17. Using self-talk, key words, and imagery before and during race simulations?	8.33 (0.58)	7.0 (1.0)	4.0 (2.2)	4.2 (2.33)	7.15 (2.25)
Additional Concerns about Training 					

SPORT PSYCHOLOGY QUESTIONNAIRE FOR SWIMMING COACHES

This questionnaire was designed to help you to identify areas for mental skills training at practices and competitions in which swimmers need to improve, and for which they might need help from a sport psychologist to achieve that improvement. Please answer each question honestly. All information will be kept confidential.

For each question, write in the number that best expresses your reaction in terms of the following scale:

Definitely Not				Sometimes or to Some Extent				Definitely Yes
1	2	3	4	5	6	7	8	9

COMPETITION	Is this something this athlete needs to improve on?	Are you confident in your ability to answer this question?
Would you say that, just before or during a meet, this swimmer needs to improve at: 1. Thinking positive thoughts? (e.g., "I know I can hit the splits I'm going for", "I'm going for a best time", etc.)	5.67 (2.16)	6.83 (2.23)
2. Tuning out negative thoughts? (e.g., "I hope I don't come in last", "These swimmers are really fast", etc.)	5.83 (1.94)	6.5 (2.07)
3. Staying loose and not getting too nervous: a) just before a race? b) in pressure situations?	6.5 (2.07)	7.5 (0.84)
4. Maintaining/regaining their confidence in difficult situations? (e.g., they have a bad start/split, they're behind, they feel really nervous, etc.)	6.5 (1.87)	7.5 (0.84)
5. Maintaining their concentration during a race? (e.g., focusing on technique, concentrating on turns, etc.)	5.33 (1.63)	7.33 (0.82)
6. Blocking out distractors over which they have no control? (e.g., the time of day of their race, who they're competing against, etc.)	4.0 (2.0)	7.17 (0.75)
7. Blocking out what people might say if they don't perform well? (e.g., comments from parent(s), coach, friends, or spectators) Other? _____	4.83 (2.48)	7.17 (1.17)
8. Blocking out distractors that don't involve swimming? (e.g., school, family, or relationship problems) Other? _____	6.33 (2.66)	8.33 (0.52)

Definitely
Not

Sometimes or
to Some Extent

Definitely
Yes

1 2 3 4 5 6 7 8 9

9. Refocusing after they get distracted for any reason? (e.g., while waiting behind the blocks during the heat before theirs, a competitor invades their space, etc.)	Is this something this athlete needs to improve on? 3.5 (1.38)	Are you confident in your ability to answer this question? 7.17 (0.75)
10. Staying energized in difficult situations? (e.g., when they feel fatigued or ill, their opponents have much faster entry times, etc.)	5.17 (2.14)	6.83 (0.41)
11. Communicating with you, their coach? (e.g., specific things on which you need to focus during the race, etc.)	4.0 (2.68)	8.33 (0.82)
12. Making adjustments as the race progresses? (e.g., to deal with an opponent's tactics, etc.)	4.17 (1.60)	6.33 (1.21)
13. Staying positive throughout a race? (e.g., they're feeling pain, falling behind, etc.)	5.0 (1.67)	6.0 (1.26)
14. Managing troublesome emotions? (e.g., excitement, anger, disappointment, etc.)	4.5 (2.59)	7.83 (0.75)
15. Giving 100% effort when there are excuses not to? (e.g., they are swimming against people they have swum against several times, they are placing poorly in a race, they begin to feel fatigued, etc.)	4.0 (2.45)	7.67 (0.52)
16. Setting challenging yet attainable goals for each meet?	4.33 (2.16)	6.67 (1.21)
17. Having a better health management plan before and during a meet? (e.g., getting enough sleep, drinking enough water, eating properly, etc.)	3.0 (2.45)	7.83 (0.75)
18. Preparing and following a detailed precompetition and competition plan?	4.75 (0.50)	4.0 (1.58)
19. Communicating their precompetition needs to others? (e.g., parent(s), coach, teammates, and friends, etc.)	5.33 (2.66)	6.5 (1.64)
20. Staying supportive of and praising teammates' performance?	3.17 (2.64)	8.33 (0.82)

Definitely
Not

Sometimes or
to Some Extent

Definitely
Yes

1 2 3 4 5 6 7 8 9

IMMEDIATELY AFTER A MEET	Is this something this athlete needs to improve on?	Are you confident in your ability to answer this question?
Would you say that this swimmer needs to improve at: 1. Evaluating their mental preparation and swimming performance for that meet?	5.83 (1.17)	6.33 (0.82)
2. Putting aside a poor performance and focusing on the next race/meet?	5.83 (2.14)	7.0 (0.63)
3. Remembering the good things that happened, and incorporating them into mental preparation for the next race/meet?	6.17 (1.72)	7.17 (1.33)
4. Communicating with you, their coach? (e.g., "How was my technique?", "My turns?", etc.)	4.33 (2.66)	7.83 (0.98)
5. Learning from their mistakes so that they can improve? (e.g., "Explode more off the turn", etc.)	4.17 (2.14)	7.83 (0.75)
<u>Additional Concerns about Competitions</u> <hr/> <hr/> <hr/> <hr/>		
TRAINING		
Would you say that, at practices, this swimmer needs to improve at:		
1. Setting specific physical, technical, tactical, and mental goals for every practice?	4.5 (2.43)	7.83 (0.75)
2. Keeping a written record of progress in meeting their goals?	6.75 (2.63)	7.0 (1.41)
3. Arriving at practice totally committed to do their best? (e.g., consistently being stretched before the practice is scheduled to start, etc.)	4.0 (2.9)	7.83 (0.41)
4. Maintaining their concentration, especially when practice gets long, repetitive, or uninteresting?	3.17 (1.60)	7.67 (0.52)
5. Maintaining their effort and focus, especially when they're tired or don't feel like being there?	4.5 (2.17)	7.67 (0.52)

Definitely
Not

Sometimes or
to Some Extent

Definitely
Yes

1 2 3 4 5 6 7 8 9

6. Making better use of full practice time? (e.g., swimming all sets under the set time, practicing good turns at both ends, etc.)	Is this something this athlete needs to improve on? 3.0 (1.55)	Are you confident in your ability to answer this question? 7.67 (0.82)
7. Staying positive when they're having a bad practice?	5.83 (2.32)	8.17 (0.75)
8. Remaining positive when an injury forces them to stop training?	3.0 (0)	8.0 (0)
9. Constantly working on improving their technique? (i.e., don't just go through the motions)	3.83 (1.83)	7.83 (0.41)
10. Trying new and challenging skills? (e.g., trying to perfect a new stroke or turn, etc.)	2.33 (0.52)	7.83 (0.98)
11. Practicing mental skills, as well as physical skills?	4.8 (1.64)	6.8 (0.45)
12. Not worrying about what other swimmers are doing? (i.e., concentrating on what <u>they</u> have to do to improve)	3.67 (1.97)	7.5 (0.55)
13. Using key words and self-talk to improve their skills? (e.g., on backstroke: "Head still", "Hips high", etc.)	4.33 (1.75)	7.0 (0.89)
14. Making better use of visualization/mental rehearsal before practices to improve their skills?	4.6 (1.82)	6.6 (0.55)
15. Focusing on having quality practices?	3.5 (2.26)	7.83 (0.41)
16. Doing serious race simulations during some practices? (e.g., using a start gun, timing their splits, swimming against other club members, wearing competitive suits, etc.)	2.83 (2.04)	8.17 (0.41)
17. Using self-talk, key words, and imagery before and during race simulations?	3.4 (2.07)	7.2 (0.84)
<u>Additional Concerns about Practices</u>		

Date: _____

Name of Athlete: _____

Coach: _____

SPORT PSYCHOLOGY QUESTIONNAIRE FOR BASKETBALL COACHES

This questionnaire was designed to help you to identify areas for mental skills training at practices and competitions in which players need to improve, and for which they might need help from a sport psychologist to achieve that improvement. Please answer each question honestly. All information will be kept confidential.

For each question, write in the number that best expresses your reaction in terms of the following scale:

Definitely Not 1 2 3 4 5 6 7 8 9 Definitely Yes

	Sometimes or to Some Extent	Definitely Yes
GAMES Would you say that, just before or during a game, this athlete needs to improve at: 1. Thinking positive thoughts? (e.g., "An easy 2 points", "I'm going to can this one", etc.)	5.33 (3.14)	8.5 (0.55)
2. Tuning out negative thoughts? (e.g., thinking, just before a game-tying free throw, "I hope I don't blow this one!", etc.)	5.83 (2.79)	8.17 (1.17)
3. Staying relaxed and not getting too nervous: a) just before the game? b) in pressure situations?	5.33 (3.39)	7.67 (1.75)
4. Maintaining/regaining their confidence in difficult situations? (e.g., they have a bad warmup, they make a mistake, they get subbed off, their shot gets blocked, the ball gets stolen from them, their check beats them, etc.)	4.33 (3.20)	8.0 (1.55)
5. Maintaining their concentration on the task at hand? (e.g., focusing on the front rim before each shot, taking it one play at a time, etc.)	4.67 (2.58)	8.33 (0.82)
6. Blocking out distractors over which they have no control? (e.g., who they are playing against, who they are checking, the gym where they are playing, the fans, etc.)	5.83 (2.48)	7.67 (1.63)
7. Blocking out what people might say if they lose or don't perform well? (e.g., comments from parents, coach, friends, or spectators) Other? _____	5.83 (2.04)	8.0 (1.26)
8. Blocking out distractors that don't involve basketball? (e.g., school, family, or relationship problems) Other? _____	4.50 (3.15)	8.67 (0.52)

Definitely
Not

Sometimes or
to Some Extent

Definitely
Yes

1 2 3 4 5 6 7 8 9

9. Refocusing after they get distracted for any reason? (e.g., an opponent tries to put them off their game, they have a bad first half, the referee makes a bad call, etc.)	Is this something this athlete needs to improve on? 5.33 (3.01)	Are you confident in your ability to answer this question? 8.17 (1.6)
10. Staying energized in difficult situations? (e.g., when they feel fatigued or ill, have a bad warmup, nothing else is going right, etc.)	5.5 (3.62)	8.33 (1.03)
11. Communicating tactically with teammates? (e.g., "You've got helpside", "Take away the baseline", "Take the ball", etc.)	5.5 (2.51)	8.67 (0.52)
12. Identifying and reacting to their opponents' weaknesses and making adjustments as the game progresses? (e.g., their shot is not going in, their opponent is taking away the right-hand drive, etc.)	5.5 (2.51)	8.5 (0.55)
13. Being assertive when the opportunity presents itself? (e.g., driving for the basket when they get a step on their opponent, etc.)	5.17 (2.93)	8.33 (0.82)
14. Managing troublesome emotions? (e.g., excitement, anger, disappointment, etc.)	5.67 (2.66)	8.33 (0.82)
15. Giving 100% effort when there are excuses not to? (e.g., they are playing a team they play often, they are losing by a large margin, etc.)	5.83 (3.06)	8.50 (0.84)
16. Setting challenging yet attainable goals for each game?	5.5 (2.17)	6.17 (3.71)
17. Having a better health management plan before games? (e.g., getting enough sleep, drinking enough water, eating properly, etc.)	4.6 (2.51)	7.0 (2.53)
18. Preparing and following a detailed precompetition and competition plan?	6.0 (2.45)	5.67 (3.93)
19. Communicating their precompetition needs to others? (e.g., parent(s), coach, teammates, and friends, etc.)	6.0 (2.0)	7.0 (3.10)
20. Staying supportive of and praising teammates' performance? (e.g., "Good job", "Nice shot", etc.)	5.83 (3.37)	8.33 (0.82)

Definitely
Not

Sometimes or
to Some Extent

Definitely
Yes

1 2 3 4 5 6 7 8 9

IMMEDIATELY AFTER A GAME	Is this something this athlete needs to improve on?	Are you confident in your ability to answer this question?
<p>Would you say that this athlete needs to improve at:</p> <p>1. Evaluating their mental preparation and playing performance for that game?</p>	6.33 (1.51)	8.17 (0.98)
<p>2. Putting aside a poor performance and focusing on the next game?</p>	7.0 (2.45)	8.17 (0.98)
<p>3. Remembering the good things that happened, and incorporating them into mental preparation for the next game? (e.g., "I blocked out well", "I saw the ball at all times", etc.)</p>	5.67 (2.80)	8.0 (1.10)
<p>4. Communicating with you, their coach? (e.g., "What can I improve upon?" "What did I do right or wrong?", etc.)</p>	6.0 (2.45)	8.0 (1.55)
<p>5. Learning from their mistakes in order to improve? (e.g., "I will fill the lane harder next time", "I will follow through on my shot more", etc.)</p>	5.67 (2.94)	8.0 (1.67)
<p><u>Additional Concerns about Games</u></p> <p>_____</p> <p>_____</p> <p>_____</p>		
<p>PRACTICES</p>		
<p>Would you say that, at practices, this athlete needs to improve at:</p>		
<p>1. Setting specific physical, technical, tactical, and mental goals for every practice?</p>	6.67 (1.86)	5.67 (3.93)
<p>2. Keeping a written record of progress in meeting their goals?</p>	7.33 (1.97)	5.33 (4.08)
<p>3. Arriving at practice totally committed to do their best?</p>	5.17 (2.86)	8.0 (1.67)
<p>4. Maintaining their concentration, especially when practice gets long, repetitive, or uninteresting?</p>	5.67 (2.73)	8.17 (1.33)
<p>5. Maintaining their effort and focus, especially when they are tired or don't feel like being there?</p>	5.33 (2.73)	8.33 (1.03)

Definitely
Not

Sometimes or
to Some Extent

Definitely
Yes

1 2 3 4 5 6 7 8 9

<p>6. Making better use of full practice time? <i>(e.g., shooting between drills, ball handling if they're subbed off, etc.)</i></p>	<p>Is this something this athlete needs to improve on? 5.0 (1.1)</p>	<p>Are you confident in your ability to answer this question? 8.33 (0.82)</p>
<p>7. Staying positive when they're having a bad practice?</p>	<p>5.5 (2.07)</p>	<p>8.17 (1.17)</p>
<p>8. Remaining positive when an injury forces them to stop training?</p>	<p>5.67 (2.07)</p>	<p>6.0 (3.95)</p>
<p>9. Improving their consistency and fine tuning the skills they can already perform, rather than just going through the motions? <i>(e.g., making sure their crossover dribble is low & fast, etc.)</i></p>	<p>6.67 (2.58)</p>	<p>8.33 (0.82)</p>
<p>10. Working more on skill deficiencies?</p>	<p>6.0 (2.76)</p>	<p>8.33 (0.82)</p>
<p>11. Practicing mental skills, as well as physical skills?</p>	<p>7.33 (1.97)</p>	<p>5.67 (3.93)</p>
<p>12. Forgetting about what other players are doing, or how much playing time they are getting? <i>(i.e., concentrating on what <u>they</u> have to do to improve)</i></p>	<p>6.33 (3.20)</p>	<p>8.83 (0.41)</p>
<p>13. Using key words and self-talk to improve their skills? <i>(e.g., "See the ball", "Follow through", etc.)</i></p>	<p>7.5 (1.97)</p>	<p>5.67 (3.93)</p>
<p>14. Making better use of visualization/mental rehearsal to improve skills?</p>	<p>6.83 (2.04)</p>	<p>5.0 (4.38)</p>
<p>15. Giving 100% effort and concentration to the task at hand, in order to have quality practices? <i>(e.g., if ball handling, do it accurately and precisely, etc.)</i></p>	<p>6.5 (2.67)</p>	<p>7.83 (1.83)</p>
<p>16. Doing serious game simulations, and making them as realistic as possible? <i>(e.g., visualizing what the defence does when they headfake and adjusting their move accordingly, etc.)</i></p>	<p>6.17 (2.93)</p>	<p>8.17 (1.33)</p>
<p>17. Using mental imagery, self-talk, and key words before and during game simulations?</p>	<p>7.0 (2.19)</p>	<p>5.0 (4.38)</p>
<p>Additional Concerns about Practices</p> <hr/> <hr/> <hr/>		

Appendix D

Mean (and standard deviation) of the re-test sport specific questionnaires for
volleyball and running coaches

The retest sport specific questionnaires contain the means (and standard deviations),
across all coaches in that sport, for each column. The standard deviation is the
number which is in 'parentheses'.

Name of Athlete: _____ Date: _____ Name of Coach: _____

SPORT PSYCHOLOGY QUESTIONNAIRE FOR VOLLEYBALL COACHES

This questionnaire was designed to help identify areas for mental skills training at practices and competitions in which players need to improve, and for which they might need help from a sport psychologist to achieve that improvement. Please answer each question as best as you are able. All information will be kept confidential.

For each question, write in the number that best expresses your reaction in terms of the following scale:

Definitely Not				Sometimes or to Some Extent					Definitely Yes
1	2	3	4	5	6	7	8	9	

MATCHES	Is this something this athlete needs to improve on?	Are you confident in your ability to answer this question?
Would you say that, just before or during a match, this player needs to improve at:		
1. Thinking positive thoughts? (e.g., "I'm going to kill this one", "This take is going right to the setter", etc.)	5.14 (1.94)	9.0 (0)
2. Tuning out negative thoughts? (e.g., "I hope they don't serve to me", etc.)	5.22 (2.13)	9.0 (0)
3. Staying relaxed and not getting too nervous: a) just before the game? b) in pressure situations?	4.67 (2.14)	9.0 (0)
4. Maintaining/regaining their confidence in difficult situations? (e.g., when they shank a ball out of bounds, they get stuffed, they aren't getting any sets, they carry a ball, etc.)	4.67 (1.72)	9.0 (0)
5. Maintaining their concentration on the task at hand? (e.g., seeing the ball leave their arms when they receive the serve, etc.)	4.67 (1.94)	9.0 (0)
6. Blocking out distractors over which they have no control? (e.g., who they are playing against, who is hitting the ball when they are blocking or in the back row, the size of the opponents, the height of the roof, noisy fans, etc.)	4.61 (2.17)	8.72 (0.46)
7. Blocking out what other people might say if they lose or don't perform well? (e.g., comments from parent(s), coach, teammates, friends, other players, spectators) Other? _____	4.11 (2.05)	8.72 (0.46)
8. Blocking out distractors that don't involve volleyball? (e.g., family, school, relationship problems) Other? _____	4.39 (2.20)	8.72 (0.46)
9. Refocusing after they get distracted for any reason? (e.g., if the referee blows a call, they hit the first few balls out of bounds, players are trash talking, etc.)	4.56 (1.82)	9.0 (0)
10. Staying energized in difficult situations? (e.g., when they feel tired or sore, they have a bad warmup, nothing else is going right, etc.)	4.50 (2.20)	9.0 (0)
11. Communicating tactically with teammates? (e.g., "Two hitters in the back row", "You take long", "I've got it", etc.)	4.17 (2.62)	9.0 (0)

Definitely Not 1 2 3 4 Sometimes or to Some Extent 5 6 7 8 9 Definitely Yes

	Is this something this athlete needs to improve on?	Are you confident in your ability to answer this question?
12. Identifying and reacting to their opponents' weaknesses, and making adjustments as the game progresses? (e.g., tip if the middle is open, hit off/around the block if there are two blockers, etc.)	5.06 (1.95)	9.0 (0)
13. Being assertive when the opportunity presents itself? (e.g., they kill the ball if there is one blocker, etc.)	3.61 (2.48)	9.0 (0)
14. Managing troublesome emotions? (e.g., excitement, anger, disappointment, etc.)	4.44 (1.62)	8.72 (0.46)
15. Giving 100% effort when there are excuses not to? (e.g., they are playing a team they have played often, they are losing by a large margin, etc.)	4.61 (1.79)	9.0 (0)
16. Setting challenging yet attainable goals for each match?	4.78 (1.93)	8.44 (0.92)
17. Having a better health management plan before and during each match/tournament? (e.g., getting enough sleep, drinking enough water, eating properly, etc.)	4.06 (1.66)	8.44 (0.92)
18. Preparing and following a detailed precompetition and competition plan?	4.67 (1.88)	8.44 (0.92)
19. Communicating their precompetition needs to others? (e.g., parent(s), coach, teammates, friends, etc.)	4.83 (1.92)	8.44 (0.92)
20. Staying supportive of and praising teammates' performance? (e.g., "Good set", "Great hit", "Good take", etc.)	3.78 (2.18)	9.0 (0)
IMMEDIATELY AFTER A MATCH		
Would you say that this player needs to improve at:		
1. Evaluating their mental preparation and playing performance for that match?	4.67 (1.33)	8.44 (0.92)
2. Putting aside a poor performance and focusing on the next match?	4.11 (1.97)	8.72 (0.46)
3. Remembering the good things that happened, so that they can incorporate them into mental preparation for the next match?	3.89 (1.23)	8.67 (0.49)
4. Communicating with you, their coach? (e.g., "What can I improve upon?", "What did I do right or wrong?", etc.)	4.44 (2.38)	8.72 (0.46)
5. Learning from their mistakes so that they can improve? (e.g., "I will absorb the ball more on serve reception", "I will use more backsets", etc.)	4.17 (1.69)	8.94 (0.24)
Additional Concerns about Games or Matches		

Definitely
Not

Sometimes or
to Some Extent

Definitely
Yes

1 2 3 4 5 6 7 8 9

PRACTICES		Is this something this athlete needs to improve on?	Are you confident in your ability to answer this question?
Would you say that, at practices, this athlete needs to improve at:			
1.	Setting specific physical, technical, tactical, and mental goals for every practice?	4.83 (1.86)	8.89 (0.47)
2.	Keeping a written record of progress in meeting their goals?	4.94 (1.63)	8.72 (0.46)
3.	Arriving at each practice totally committed to doing their best?	3.94 (1.70)	9.0 (0)
4.	Maintaining their concentration, especially when practice is long, repetitive, or uninteresting?	4.72 (1.36)	9.0 (0)
5.	Maintaining their effort and focus, especially when they're tired, or don't feel like being there?	4.39 (2.06)	9.0 (0)
6.	Making better use of the full practice time? (<i>e.g., volley against the wall between drills, practice arm action when waiting in line to hit, etc.</i>)	3.44 (1.72)	9.0 (0)
7.	Staying positive when a practice doesn't go well?	4.22 (1.70)	9.0 (0)
8.	Remaining positive when an injury forces them to stop training?	3.5 (1.89)	8.78 (0.43)
9.	Improving their consistency and fine tuning the skills they can already perform rather than just going through the motions? (<i>e.g., concentrate on their follow through when they are hitting at practices, etc.</i>)	4.44 (2.09)	9.0 (0)
10.	Working more on skill deficiencies?	4.67 (2.17)	9.0 (0)
11.	Practicing mental skills, as well as physical skills?	4.44 (1.62)	8.39 (0.92)
12.	Not worrying about what other players are doing or how much playing time they are getting? (<i>i.e., concentrating on what <u>they</u> have to do to improve</i>)	3.67 (1.85)	9.0 (0)
13.	Using key words and self-talk to improve their skills? (<i>e.g., "Watch the ball", "Follow-through", etc.</i>)	3.61 (1.29)	8.44 (0.92)
14.	Making better use of visualization/mental rehearsal to improve skills?	4.11 (1.18)	8.22 (1.06)
15.	Giving 100% effort and concentration to the task at hand, in order to have quality practices?	3.67 (1.94)	8.94 (0.24)
16.	Doing serious game simulations, and making them as realistic as possible? (<i>e.g., diving for all balls, pretending they're going around a block, etc.</i>)	4.0 (1.14)	8.94 (0.24)
17.	Using mental imagery, key words, and self-talk before and during game simulations?	4.22 (1.26)	8.5 (0.62)
<u>Additional Concerns about Practices</u>			

Athlete: _____ Race: _____ Date: _____ Coach: _____

SPORT PSYCHOLOGY QUESTIONNAIRE FOR RUNNING COACHES
(Middle Distance and Distance)

This questionnaire was designed to help identify areas for mental skills training at practices and competitions in which runners need to improve, and for which they might need help from a sport psychologist to achieve that improvement. Please answer each question as best as you are able. All information will be kept confidential.

For each question, write in the number that best expresses your reaction in terms of the following scale:

Definitely Not 1 2 3 4 Sometimes or to Some Extent 5 6 7 8 Definitely Yes 9

COMPETITION	Is this something this athlete needs to improve on?	Are you confident in your ability to answer this question?
Would you say that, just before or during a meet, this runner needs to improve at:		
1. Thinking positive thoughts? (e.g., "I know I can hit the splits I'm going for", "I'm going for a personal best", etc.)	3.95 (1.36)	6.95 (1.99)
2. Tuning out negative thoughts? (e.g., "I hope I don't come in last", "These runners are really fast", etc.)	4.15 (1.69)	7.1 (1.94)
3. Staying relaxed and not getting too nervous: a) just before a race? b) in pressure situations?	4.0 (1.69)	7.05 (1.93)
4. Maintaining/regaining their confidence in difficult situations? (e.g., they have a bad start/split, they're behind, they feel really nervous, etc.)	4.15 (1.84)	7.1 (1.94)
5. Maintaining their concentration during a race? (e.g., focusing on form/technique, concentrating on race strategy, etc.)	3.9 (1.86)	7.05 (1.93)
6. Blocking out distractors over which they have no control? (e.g., the time of day of their race, who they're competing against, etc.)	3.15 (1.27)	7.05 (1.93)
7. Blocking out what people might say if they don't perform well? (e.g., comments from parent(s), coach, friends, or spectators) Other? _____	3.55 (1.50)	7.1 (1.94)
8. Blocking out distractors that don't involve running? (e.g., school, family, or relationship problems) Other? _____	2.8 (1.2)	6.95 (1.99)
9. Refocusing after they get distracted for any reason? (e.g., while waiting during the heat before theirs, a competitor invades their space, etc.)	3.05 (1.23)	7.05 (1.93)
10. Staying energized and mentally ready in difficult situations? (e.g., when they feel fatigued or ill, your opponents have much faster qualifying times, etc.)	3.50 (1.57)	7.05 (1.93)

Definitely Not 1 2 3 4 5 6 7 8 9 Definitely Yes

Sometimes or to Some Extent

	Is this something this athlete needs to improve on?	Are you confident in your ability to answer this question?
11. Communicating with you, their coach, before the race? (e.g., specific things on which they need to focus during the race, etc.)	2.7 (0.57)	7.1 (1.94)
12. Making adjustments as the race progresses? (e.g., dealing with an opponent's tactics, etc.)	3.4 (1.14)	7.05 (1.93)
13. Managing troublesome emotions? (e.g., excitement, anger, disappointment, etc.)	3.25 (1.16)	7.05 (1.93)
14. Being assertive and inserting some pace when the opportunity presents itself? (e.g., a tired opponent, near the end of a race, a predetermined kick point, etc.)	3.45 (1.39)	6.95 (1.93)
15. Giving 100% effort when there are excuses not to? (e.g., they are running against people they have run against several times, they are placing poorly in a race, they begin to feel fatigued, etc.)	4.15 (1.87)	6.95 (1.93)
16. Setting challenging yet attainable goals for each race?	3.10 (1.25)	7.0 (1.95)
17. Having a better health management plan before and during a meet? (e.g., getting enough sleep, drinking enough water, eating properly, etc.)	3.25 (1.48)	7.15 (1.98)
18. Preparing and following a detailed precompetition and competition plan?	3.45 (1.28)	7.15 (1.98)
19. Communicating their precompetition needs to others? (e.g., parent(s), coach, teammates, and friends, etc.)	3.0 (1.12)	7.1 (1.97)
20. Staying supportive of and praising teammates' performance?	2.25 (0.79)	7.25 (2.05)
IMMEDIATELY AFTER A MEET		
Would you say that this runner needs to improve at:		
1. Evaluating their mental preparation and running performance for that meet?	3.45 (1.19)	7.0 (1.95)
2. Putting aside a poor performance and focusing on the next competition/race?	4.35 (1.35)	7.0 (1.95)
3. Remembering the good things that happened, and incorporating them into mental preparation for the next competition/race?	3.65 (1.18)	6.9 (1.94)
4. Communicating with you, their coach? (e.g., "How was my form?", "My strategy?")	2.90 (0.64)	6.9 (1.94)
5. Learning from their mistakes so that they can improve? (e.g., "Stay in good position off the turn", etc.)	3.35 (1.09)	6.7 (2.23)
<u>Additional Concerns about Races</u>		

Definitely Not 1 2 3 4 5 6 7 8 9 Definitely Yes

Sometimes or to Some Extent

TRAINING		Is this something this athlete needs to improve on?	Are you confident in your ability to answer this question?
Would you say that, during training, this runner needs to improve at:			
1.	Setting specific physical, technical, tactical, and mental goals for every practice?	3.75 (1.21)	6.75 (2.07)
2.	Keeping a written record of progress in meeting their goals?	4.45 (1.43)	6.75 (2.07)
3.	Arriving at practice physically and mentally committed to doing their best?	3.9 (1.74)	7.15 (1.98)
4.	Maintaining their concentration, especially when practice gets long, repetitive, or uninteresting?	4.35 (1.98)	7.10 (1.97)
5.	Maintaining their effort and intensity, especially when they are tired or don't feel like being there?	4.35 (2.16)	7.0 (1.97)
6.	Making better use of full practice time? (e.g., run all intervals at the set time, mentally rehearse between intervals, etc.)	3.7 (1.49)	6.9 (2.02)
7.	Staying positive when they're having a bad practice?	4.4 (1.6)	6.9 (2.02)
8.	Remaining positive when an injury forces them to stop training?	4.4 (1.14)	6.95 (1.99)
9.	Constantly working on improving their technique, strength, or speed? (i.e., not just going through the motions)	3.85 (1.31)	7.0 (1.95)
10.	Trying new and challenging skills? (e.g., trying to perfect a new racing strategy, etc.)	3.5 (1.19)	7.0 (1.95)
11.	Practicing mental skills, as well as physical skills?	4.3 (1.78)	7.1 (1.94)
12.	Not worrying about what other runners are doing? (i.e., concentrating on what they have to do to improve)	4.0 (1.45)	7.1 (1.94)
13.	Using key words and self-talk to improve their running? (e.g., "Stay loose", "Drive my arms", "Relax and run faster", etc.)	4.0 (1.38)	7.1 (1.94)
14.	Making better use of visualization/mental rehearsal before practices to improve their skills?	4.0 (1.52)	7.1 (1.94)
15.	Giving 100% concentration to the task at hand, in order to have quality practices?	3.55 (1.64)	7.1 (1.94)
16.	Doing serious race simulations during some practices? (e.g., use a start gun, time their splits, run against other club members, wear competitive suits, etc.)	3.5 (1.43)	7.1 (1.94)
17.	Using self-talk, key words, and imagery before and during race simulations?	3.8 (1.54)	7.1 (1.94)
Additional Concerns about Training			

Appendix E

General questionnaire for athletes

General questionnaire to be completed by athletes

Please answer this questionnaire without discussing it with anyone else. Your answers will be completely confidential and will not affect your position on the team or with the club in ANY way.

If a question does not apply to your sport, leave it blank.

Name: _____ Age: _____ Sex: _____

Sport Information

Sport: _____ Position: _____

Level of sport (i.e., high school, university, etc.): _____

of years at this level: _____

Date of last competition: _____

Number of years involved with this sport: _____

During the on-season

of practices/ week: _____ Total practice time/week (in hours): _____

Amt. of training time /week in addition to practice: _____

What does additional training include (i.e., weights, running, etc.)

Have you missed any practices (this season) because of injury? _____

If yes, how many? _____

Have you missed any games or competitions because of injury? _____

If yes, how many? _____

How long were/have you been injured? _____

of competitions/ month: _____ Total competition time/month (in hours): _____

Team sports only:

(For the team that you were with last year)

of wins last season: _____ losses? _____

Best placing last season: (a) league _____ (b) tournament _____

Average amt. of playing time per game: _____

Individual sports only:

Best finish last season? _____

All sports

On a scale of 1 to 10 where:

No	Somewhat						Yes		
1	2	3	4	5	6	7	8	9	10

Were you happy with your performance last season? _____

Are you happy with your performance so far this season? _____

If you play a team sport, are you happy with the amount of playing time you are receiving this season? _____

Familiarity with sport psychology consulting

Have you ever worked with a sport psychologist? yes _____ no _____

If no, what do you think a sport psychologist does when they work with an athlete?

If yes, for how long? _____

of individual sessions: _____ # of group sessions: _____

What information was discussed when you worked with a sport psychologist?

On a scale of 1 to 10 where:

Not at all					Somewhat					Very
1	2	3	4	5	6	7	8	9	10	

How helpful was working with a sport psychologist? _____

Mental Preparation

Please answer each of the questions in this section based upon an average week.

Not at all					Somewhat					A lot
Never					Some of the time					All the Time
1	2	3	4	5	6	7	8	9	10	

IMAGERY

Do you use imagery? _____

If no, go on to the self talk section.

If yes, how often do you use imagery? _____

When you use imagery what % of the time do you do each of the following:

(a) watch yourself perform as if watching yourself on a camcorder? _____

(b) feel as if you are actually performing the activity? _____

Do you use imagery to:

(a) prepare yourself for training? _____

(b) perfect skills within the training sessions? _____

(c) make technical corrections? _____

(d) imagine yourself being successful in competition? _____

(e) to see yourself achieve your ultimate goal? _____

SELF TALK

Do you:

(a) experience negative selftalk during practice? _____

(b) use positive selftalk during practice? _____

(c) experience negative selftalk during competition? _____

(d) use positive selftalk during competition? _____

GOALSETTING

Do you set:

(a) daily practice goals? _____

(b) goals for each competition or tournament? _____

(c) seasonal goals? _____

(d) goals for several years from now? _____

(e) ultimate dream goals? _____

RELAXATION

Do you feel able to control or manage your anxiety before a competition? _____

Prior to a competition, do you feel mentally relaxed? _____

Prior to a competition, do you feel physically relaxed? _____

FOCUS

During competition do you feel connected to what you are doing? _____

Do you have strategies to deal with or tune out most typical distracters? _____

Do you have a plan to recognize and cope with pressures, especially when the competition is close or on the line? _____

PRECOMPETITION PLAN

Do you plan a time frame for when to complete specific parts of your precompetition routine? _____

Does your precompetition plan include:

(a) use of mental imagery? _____

(b) warming up well physically? _____

(c) positive thoughts? _____

(d) a reminder to focus on what had previously worked? _____

(e) refocusing strategies? _____

(f) a game/ competition plan? _____

(g) individual goals? _____

Not at all
Never
1 2 3 4 5 6 7 8 9 10
Somewhat
Some of the time
A lot
All the Time

Do you feel that you perform up to your potential at practices? _____

Do you feel that you give 100% effort at practices? _____

Do you think that you perform up to your potential at competitions? _____

Do you feel that you give 100% effort at competitions? _____

Other areas of Life

Does negative thinking, excessive nervousness, or lack of goals interfere with or negatively effect the following areas of your life? Please rate on each of the two scales below:

INTERFERE WITH

Not at all
1 2 3 4 5 6 7 8 9 10
Somewhat
A lot

0% of the time
1 2 3 4 5 6 7 8 9 10
50% of the time
100% of the time

	Interfere with	How much
Sleep	_____	_____
Health	_____	_____
Eating	_____	_____
Quality of Life	_____	_____
Sport Performance	_____	_____
Reaching potential	_____	_____
Emotional well being	_____	_____

Appendix F

General questionnaire for coaches

General questionnaire to be completed by coaches

Please answer this questionnaire without discussing it with anyone else, including the player whom you are evaluating. Your answers will be completely confidential.
If a question does not apply to the sport in which you coach, please leave it blank.

Name: _____ Sex: _____

Sport Information

Sport you are coaching: _____

Level of sport (i.e., high school, university, etc.): _____

of years coaching at this level: _____

Number of years coaching this sport at any level: _____

During the on-season

of practices/ week: _____ Total practice time/week (in hours): _____

Total amt. of time (in hours) devoted to coaching per week: _____

On a scale of 1 to 10 where:

No				Somewhat					Yes
1	2	3	4	5	6	7	8	9	10

Were you happy with the performance of your team/athletes in which you coached last season? _____

Familiarity with sport psychology consulting

Have you ever asked a sport psychologist to work with athletes whom you coached?

yes _____ no _____

If yes, for how long? _____

of individual sessions: _____ # of group sessions: _____

Other areas of Life

Does negative thinking, excessive nervousness, or lack of goals interfere with or negatively affect the following areas of your athlete's lives? Please rate on each of the two scales below:

INTERFERE WITH

Not at all				Somewhat					A lot
1	2	3	4	5	6	7	8	9	10

HOW MUCH

0% of the time				50% of the time					100% of the time
1	2	3	4	5	6	7	8	9	10

	Interfere with this athlete's:	How much
Sleep	_____	_____
Health	_____	_____
Eating	_____	_____
Quality of Life	_____	_____
Sport Performance	_____	_____
Reaching potential	_____	_____
Emotional well being	_____	_____

Appendix G

Information to cover during initial meeting with coaches

Study #1

Date: _____

Sport: _____

Name: _____ Phone number: _____

Number of athletes who may participate: Male: _____ Female: _____

A. Explanation of rationale of the study

- _____ Face validity
- _____ Test retest reliability
- _____ Convergent validity (comparison to coach responses)

B. Logistics

- _____ Completion of general and initial questionnaires (25 mins, before practice)
- _____ Completion of modified general and initial questionnaires 2 weeks later
(10 mins, before practice)
- _____ Coaches may complete the questionnaires at home and return to researcher
next day
- _____ Coaches need to collect ALL consent forms prior to athlete participation
- _____ I will call to confirm # of participants a few days before data collection
- _____ I will call to remind you about data collection on other occasions

C. Any foreseen problems?

D. Treatment integrity issues

- _____ Importance of honest responding
- _____ Importance of responding independently
- _____ Anonymity

F. If interested in participating

- _____ Determine when and where to drop off consent forms
- _____ 1st completion date (day: _____ time: _____ place: _____)
- _____ Retest completion date (day: _____ time: _____ place: _____)

Study #2

Date: _____

Sport: _____

Name: _____ Phone number: _____

Number of athletes who may participate: Male: _____ Female: _____

A. Explanation of rationale of the study

_____ Face validity and test retest reliability high (discuss results)

_____ Need more information (multiple samples of behavior; predictive validity)

B. Logistics

_____ Completion of general and initial questionnaire (20 mins, before practice)

_____ Completion of predictive at practices after three separate practices

_____ Completion of predictive at race/game after three separate games

_____ Coaches may complete the questionnaires at home and return to researcher next day

_____ Coaches need to collect ALL consent forms prior to athlete participation

_____ I will call to confirm # of participants a few days before data collection

_____ I will call to remind you about data collection on other occasions

D. Any foreseen problems?

E. Treatment integrity issues

_____ Importance of honest responding

_____ Importance of responding independently

_____ Anonymity

F. If interested in participating

_____ Potential athletes (names, 15 minutes playing time if bball)?

_____ Determine when and where to drop off consent forms

_____ Set date for sport specific questionnaire

(day: _____ time: _____ place: _____)

_____ Practice dates?

_____ Competitive dates?

Appendix H
Consent forms

Consent Form for First Study (for those athletes under 18)

I am a Doctoral student at the University of Manitoba, currently conducting a research project with my advisor (Dr. Garry Martin) on sport psychology. We hope that you (with your parent/guardian's approval) will agree to participate by completing two sport psychology questionnaires on two separate occasions. The questionnaires, which will be answered just before two practices, will require approximately 30 minutes to complete. We have discussed this study with your coach and they have given it their approval.

We believe that each participant will gain valuable information about mental skill strengths and weaknesses. All information in the questionnaire will be kept strictly confidential, and only group findings will be discussed.

Following the completion of the study, you will receive a report indicating your mental skill strengths and weaknesses. In addition, with your approval (and the approval of your parent/guardian), a copy of your results will be made available to your coach.

If you would like to participate in this study, we request that you (and your parent/guardian) complete the information below, and return it to your coach at the next practice.

Thank you very much for your support. Yours in Sport,

Adrienne Leslie-Toogood, M.A.
477-5972

Garry L. Martin, Ph.D, C.Psych
474-8589

I agree to participate in this study by completing two Sport Psychology Questionnaires on two separate occasions. My parent/legal guardian and I **agree/disagree** (circle your choice) that the results can be made available to my coach. My parent/legal guardian and I voluntarily signed this consent form on this _____ day of _____, 1998.

Athlete

Parent/Legal Guardian

Consent Form for First Study (for those athletes over 18)

I am a Doctoral student at the University of Manitoba, currently conducting a research project with my advisor (Dr. Garry Martin) on sport psychology. We hope that you will agree to participate by completing two sport psychology questionnaires on two separate occasions. The questionnaires, which will be answered just before two practices, will require approximately 30 minutes to complete. We have discussed this study with your coach and they have given it their approval.

We believe that each participant will gain valuable information about mental skill strengths and weaknesses. All information in the questionnaire will be kept strictly confidential, and only group findings will be discussed.

Following the completion of the study, you will receive a report indicating your mental skill strengths and weaknesses. In addition, with your approval, a copy of your results will be made available to your coach.

If you would like to participate in this study, we request that you complete the information below, and return it to your coach at the next practice.

Thank you very much for your support. Yours in Sport,

Adrienne Leslie-Toogood, M.A.
477-5972

Garry L. Martin, Ph.D, C.Psych
474-8589

I agree to participate in this study by completing two Sport Psychology Questionnaires on two separate occasions. I **agree/disagree** (circle your choice) that the results can be made available to my coach. I voluntarily signed this consent form on this _____ day of _____, 1998.

Please sign here

Consent Form for Second Study (for those athletes under 18)

I am a Doctoral student at the University of Manitoba, currently conducting a research project with my advisor (Dr. Garry Martin) on sport psychology. We hope that you (with your parent/guardian's approval) will agree to participate by completing two initial questionnaires at the beginning of one practice, in addition to a different sport psychology questionnaire after three separate practices and games/races. The questionnaires, which will be answered just after practices and games/races, will require approximately 30 minutes to complete. We have discussed this study with your coach and they have given it their approval.

We believe that each participant will gain valuable information about mental skill strengths and weaknesses. All information in the questionnaire will be kept strictly confidential, and only group findings will be discussed.

Following the completion of the study, you will receive a report indicating your mental skill strengths and weaknesses. In addition, with your approval (and the approval of your parent/guardian), a copy of your results will be made available to your coach.

If you would like to participate in this study, we request that you (and your parent/guardian) complete the information below, and return it to your coach at the next practice.

Thank you very much for your support. Yours in Sport,

Adrienne Leslie-Toogood, M.A.
477-5972

Garry L. Martin, Ph.D, C.Psych
474-8589

I agree to participate in this study by completing an initial set of questionnaires in addition to sport psychology questionnaires after three practices and three games/races. My parent/legal guardian and I **agree/disagree** (circle your choice) that the results can be made available to my coach. My parent/legal guardian and I voluntarily signed this consent form on this _____ day of _____, 1998.

Athlete

Parent/Legal Guardian

Consent Form for Second Study (for those athletes over 18)

I am a Doctoral student at the University of Manitoba, currently conducting a research project with my advisor (Dr. Garry Martin) on sport psychology. We hope that you will agree to participate by completing an initial set of questionnaires prior to one practice, and a different sport psychology questionnaire after three separate practices and games/races. The questionnaires, which will be answered just after practices and games/races, will require approximately 30 minutes to complete. We have discussed this study with your coach and they have given it their approval.

We believe that each participant will gain valuable information about mental skill strengths and weaknesses. All information in the questionnaire will be kept strictly confidential, and only group findings will be discussed.

Following the completion of the study, you will receive a report indicating your mental skill strengths and weaknesses. In addition, with your approval, a copy of your results will be made available to your coach.

If you would like to participate in this study, we request that you complete the information below, and return it to your coach at the next practice.

Thank you very much for your support. Yours in Sport,

Adrienne Leslie-Toogood, M.A.
477-5972

Garry L. Martin, Ph.D, C.Psych
474-8589

I agree to participate in this study by completing an initial set of questionnaires in addition to a sport psychology questionnaire after three practices and three games/races. I **agree/disagree** (circle your choice) that the results can be made available to my coach. I voluntarily signed this consent form on this _____ day of _____, 1998.

Please sign here

Appendix I

Researcher scripts

Researcher script for athletes in first study

- _____ Thank athletes for participating
- _____ Overview of study if first time
- _____ Importance of honest responding
- _____ Answer independently
- _____ Confidentiality (group data, not individual)
- _____ Read through instructions on each questionnaire
- _____ If runners, answer based on strongest race (same one as last time if 2nd administration)
- _____ Discuss and explain rating scales
- _____ Ask if there are any questions
- _____ Tell them to put up hand if any questions

- _____ **Confirm next time with coach and remind athletes of next session**
- _____ **Thank them for participating again**
- _____ **Arrange for coaches to complete questionnaires.**
- _____ **Arrange for pickup of questionnaires.**
- _____ **List of strongest races for runners and enter onto 2nd sport specific**
- _____ **Names of coaches and which athlete's they answered on 2nd sp.sp.**

Researcher script for athletes in second study

A. Administration of sport specific questionnaire

- _____ Thank athletes for participating
- _____ Overview of study
- _____ Importance of honest responding
- _____ Answer independently
- _____ Confidentiality (group data, not individual)
- _____ Read through instructions on each questionnaire
- _____ If swimming, answer based on strongest stroke/race (same race we will be doing concurrent on)
- _____ Discuss and explain rating scale
- _____ Ask if there are any questions
- _____ Tell them to put up hand if any questions

- _____ Confirm time with coach and remind athletes of next session (may be individual for swimmers)
- _____ Thank them for participating again
- _____ Arrange for coaches to complete questionnaires.
- _____ Arrange for pickup of questionnaires.
- _____ List of strongest races for swimmers & enter on all 3 concurrent val.
- _____ Names of coaches and which athlete's they answered and enter on all 3 concurrent validity.

Researcher script for athletes in second study

B. Questionnaires for measuring predictive validity

- _____ Thank athletes for participating
- _____ Importance of honest responding
- _____ Answer independently
- _____ Confidentiality (group data, not individual)
- _____ Read through instructions on each questionnaire
- _____ Emphasize to answer questions based ONLY on this practice/competition
- _____ Discuss and explain rating scales
- _____ Ask if there are any questions
- _____ Tell them to put up hand if any questions
- _____ Confirm time with coach and remind athletes of next session (may be individual for swimmers)
- _____ **Thank them for participating again**
- _____ **Arrange for coaches to complete questionnaires.**
- _____ **Arrange for pickup of questionnaires.**
- _____ **Make sure correct coach completes P.V. questionnaire**
- _____ **Make sure P.V. questionnaires are completed on correct race for swimmers**

Appendix J

Modified general questionnaire for athletes

Appendix K

Modified general questionnaire for coaches

Retest general questionnaire to be completed by coaches

Please answer this questionnaire without discussing it with anyone else, including the athlete whom you are evaluating. Your answers will be completely confidential. For the *italicized and underlined questions* (i.e., questions 2 and 4), please answer using the following 10-point scale:

Below Average			Average				Above Average		
1	2	3	4	5	6	7	8	9	10

Name: _____ Age: _____ Sex: _____

Sport: _____

1. How many competitions has this athlete had since you completed a similar questionnaire two weeks ago? _____

2. *How did this athlete perform at this/these competition(s)?* (use scale)

3. How many practices has this athlete had since you completed a similar questionnaire two weeks ago? _____

4. *How well did this athlete perform at these practices?* (use scale) _____

5. Has this athlete been injured since the completion of a similar questionnaire two weeks ago? _____

If yes, please give a brief description of the injury including the severity and how many practices and/or competitions this athlete has missed.

6. To your knowledge, has this athlete experienced anything troublesome over the last few weeks which may have made it difficult to concentrate on his/her sport (e.g., a fight with a significant other, financial strain, death of a loved one, a poor grade on a paper, etc.)? _____ Please give a brief description of the problematic event.

Appendix L

Convergent vailidity of the volleyball and running sport specific questionnaire

Convergent Validity of the Sport Specific Questionnaire for Volleyball

Item	Competition	Immediately After	Practice
1	-0.022	-0.270	0.143
2	0.302	0.211	0.010
3	0.002	-0.104	0.376
4	-0.286	-0.287	0.178
5	0.174	0.285	0.121
6	-0.012		0.200
7	0.519*		-0.130
8	-0.336		0.037
9	-0.144		0.056
10	0.142		0.636**
11	-0.095		0.246
12	0.223		-0.102
13	-0.313		0.084
14	0.215		-0.085
15	0.165		0.421
16	-0.143		0.125
17	0.060		0.154
18	-0.455*		
19	-0.441*		
20	-0.347		
AVERAGE All items = 0.231	-0.217	-0.163	0.066

* = correlation is significant at the 0.05 level (1-tailed)

** = is significant at the 0.01 level (1-tailed)

Convergent Validity of the Sport Specific Questionnaire for Running

Item	Competition	Immediately After	Practice
1	0.214	-0.278	0.119
2	0.092	-0.182	0.611**
3	0.167	-0.276	0.248
4	0.044	-0.298	-0.075
5	-0.079	-0.132	0.092
6	-0.229		0.271
7	0.107		-0.405*
8	0.261		-0.011
9	-0.133		-0.10
10	-0.095		-0.188
11	0.268		-0.049
12	0.032		0.117
13	0.088		0.148
14	-0.101		-0.217
15	0.146		-0.332
16	0.236		0.203
17	0.035		0.225
18	0.152		
19	-0.248		
20	-0.105		
AVERAGE All items = -0.151	-0.092	-0.318	0.021

* = correlation is significant at the 0.05 level (1-tailed)

** = is significant at the 0.01 level (1-tailed)

Appendix M

Items which were rated highly (i.e., '7', '8', or '9') on the first and second administration of the sport specific questionnaires for volleyball players and runners

Items which were rated highly (i.e., '7', '8', or '9') to the question "is this something you need to improve on" on the first and second administration of the sport specific questionnaires for volleyball players

S #	First Administration	Second Administration
48	1-7, 9, 11, 12-20 (game); 1-5 (immediately after); 1-17 (practice)	1-20 (game); 1-5 (immediately after); 1-17 (practice)
49	10, 11 (game); 5 (immediately after); 1, 9, 10, 13, 14, 15, 16 (practice)	1, 6, 12, 16, 17, 19 (game); 4 (immediately after); 2, 6, 9, 10 (practice)
50	3, 4, 6-11, 14 (game); 2, 3 (immediately after); 1, 3, 4, 5, 7, 8, 11, 12, 15, 16, 17 (practice)	1, 2, 4, 6, 7, 8, 9, 10, 11, 14, 15, 20 (game); 2 (immediately after); 1, 3, 4, 5, 7, 8, 12, 15 (practice)
54	1, 3, 5, 6, 16-20 (game); 1, 5 (immediately after); 1-5, 10, 11, 14, 15 (practice)	1-11, 18 (game); 1-4 (immediately after); 1-6, 9, 15 (practice)
56	2, 3, 4, 6, 7, 10, 11, 12, 15, 17, 18 (game); 1 - 5 (immediately after); 1, 3-7, 9, 11, 14-17 (practice)	3, 4, 5, 6, 9, 10, 11 (game); 4 (immediately after); 14, 15, 16 (practice)
57	3, 8, 10, 11, 12, 15 (game); 2, 5 (immediately after); 2, 4, 5, 7, 8, 16, 17 (practice)	4, 7, 9, 19 (game); 1, 2, 3 (immediately after); 2, 7, 8 (practice)
58	5, 14, 18 (game); 1-4, 6, 13 (practice)	None
59	2, 11, 18 (game); 4 (immediately after), 1, 2 (practice)	11, 12 (game); 2 (practice)
60	1, 11, 12 (game); 1 (immediately after); 8, 9, 10, 13, 14 (practice)	1, 4, 5, 15-19 (game); 1-5 (immediately after); 1, 2, 4, 7, 12, 13, 15, 16 (practice)
61	1, 2, 4, 5, 6, 8-16, 18 (game); 2, 3 (immediately after); 1, 3, 4, 5, 7, 8, 9, 11, 12, 14, 15, 16 (practice)	2, 4, 9, 11, 12-16, 18, 19, 20 (game); 1-5 (immediately after); 1, 2, 4-12, 14, 15, 16 (practice)
62	8, 17 (game); 1, 3 (immediately after); 2-6, 9, 13, 14, 17 (practice)	19 (game); 1-6, 10 (practice)
63	1, 2, 6, 10, 11, 13, 14, 15, 17, 19, 20 (game); 2, 3 (immediately after); 3-7, 9, 12, 14, 15-17 (practice)	2, 5, 12, 13, 16, 20 (game); 1, 3 (immediately after); 1, 2, 7, 10, 11, 14-17 (practice)
64	2, 11, 15, 16 (game); 1 (immediately after); 3, 4, 7, 11, 16, 17 (practice)	15 (game); 2 (immediately after); 2, 4 (practice)
65	1, 11, 15, 16-19 (game); 4 (immediately after); 1, 2, 4, 5, 7, 8, 10, 11, 13, 17 (practice)	1, 7, 8, 10, 11, 12, 15, 16, 19 (game); 1, 3, 4, 5 (immediately after); 1, 2, 5, 13, 16, 17 (practice)
67	1, 2, 4, 5, 7, 8, 10, 11, 12-18, 20 (game); 1-5 (immediately after); 1-11, 14-17 (practice)	1, 3, 4, 5, 7, 10, 12, 13, 14, 18, 20 (game); 1-4 (immediately after); 1, 2, 4, 5, 7, 10, 11, 17 (practice)
68	1, 2, 4, 8, 12, 14, 17, 18 (game); 1, 3, 4 (immediately after); 1, 2, 5, 7, 11, 12, 14 (practice)	1, 2, 10, 12, 17, 18 (game); 3 (immediately after); 1, 2, 11, 12, 14, 17 (practice)
69	2, 3, 8, 12 (game); 2 (practice)	2 (game); 11 (practice)
70	2, 4, 5, 7, 8-11, 14, 15, 18, 20 (game); 2, 3 (immediately after); 3, 4, 5, 7, 9, 10, 11, 15, 16 (practice)	2, 4, 9, 10, 20 (game); 1 (immediately after); 4, 5, 7 (practice)
71	2, 3, 4, 9, 10, 12-17, 19 (game); 1-5 (immediately after); 1-5, 7-12, 14, 16 (practice)	1-4, 7, 10, 12-15 (game); 2, 3, 5 (immediately after); 2, 6, 7, 10, 11, 12, 14, 17 (practice)
72	10, 12, 13, 15, 18 (game); 1, 4, 5 (immediately after); 1, 2, 4, 5, 7, 9, 10, 14, 15, 16, 17 (practice)	None

Items which were rated highly (i.e., '7', '8', or '9') to the question "is this something you need to improve on" on the first and second administration of the sport specific questionnaires for volleyball players

S #	First Administration	Second Administration
73	2, 5, 12, 15, 16, 17, 18 (game); 2, 5 (immediately after); 1, 2, 4, 5, 7, 9, 12, 14, 15, 16 (practice)	2, 12, 16, 17, 19 (game); 5 (immediately after); 2, 4, 5, 9, 10, 17 (practice)
75	4, 13 (game); 2, 3 (immediately after); 1, 2, 7 (practice)	None
76	4 (game); 3, 5 (immediately after)	None
77	2, 4, 9, 14 (game); 1, 2 (immediately after); 2, 7, 8, 10 (practice)	1, 2, 4, 5, 11, 13 (game); 4, 5 (immediately after); 2, 7 (practice)
78	2, 4, 9, 14 (game); 2, 3 (immediately after); 2, 10, 16 (practice)	1, 2, 4 (game); 4 (immediately after); 2, 8 (practice)
80	4 (immediately after); 3, 5, 6, 7, 12, 16 (practice)	None
81	1, 5, 7-13, 16, 20 (game); 1, 3, 4, 5 (immediately after); 1, 4-7, 15 (practice)	16 (game); 4 (immediately after); 1, 3-10, 12, 13, 15 (practice)
82	8 (game)	None
83	1, 2, 4, 6, 7, 9, 11, 12, 13, 15, 16, 17, 20 (game); 3, 5 (immediately after); 3-9, 11, 12, 15, 16 (practice)	1, 2, 9, 15 (game); 5, 8 (practice)
84	10, 11, 15, 18 (game); 3, 4, 5, 7, 10, 12, 15, 16 (practice)	10, 11, 15 (game); 4, 5 (practice)
85	1-5, 7, 10, 12, 13-18 (game); 1-5 (immediately after); 1, 3, 4, 5, 7, 9-17 (practice)	1-4, 9, 10, 11, 15 (game); 2, 3, 5 (immediately after); 1, 3, 4, 5, 7, 9-17 (practice)
86	11, 12, 13, 17 (game); 10 (practice)	4 (immediately after)
87	4-10, 15, 16 (practice)	15 (game); 8, 16, 17 (practice)
88	None	None
89	1, 2, 4, 11, 12, 15, 16, 17, 18, 20 (game); 2-5 (immediately after); 1-4, 6-12, 14-17 (practice)	1, 4, 5, 8-12, 14-16 (game); 5 (immediately after); 3-5, 9, 10, 12, 15 (practice)

Items which were rated highly (i.e., '7', '8', or '9') to the question "is this something you need to improve on" on the first and second administration of the sport specific questionnaires for runners

S #	First Administration	Second Administration
1	2, 3, 4, 11, 12, 15 (race)	2, 3, 12 (race); 2, 11, 16 (practice)
2	2, 4, 7, 10, 14, 15, 18 (race); 1, 2, 5 (immediately after); 1, 2, 4, 7, 8, 11, 13, 14 (practice)	2, 6, 7, 9, 13, 16, 17, 19 (race); 1 (immediately after); 3, 5, 10, 11, 14, 15 (practice)
3	2, 3, 4, 5, 7 (practice)	10, 11, 18, 19 (race); 2, 3 (immediately after); 1-7, 9-17 (practice)
4	2 (practice)	2, 9, 11, 15 (practice)
5	10, 15 (race); 1, 2, 5 (immediately after); 3, 4, 8, 9 (practice)	6 (race); 1 (immediately after); 8 (practice)
6	4, 15, 17, 18 (race); 2, 4, 7, 8, 9, 10, 15, 16 (practice)	None
7	1-6, 10, 12-15, 17, 18 (race); 1, 3, 5 (immediately after); 1, 3-15, 17 (practice)	2, 4, 5, 10, 14-17 (race); 1, 3, 5 (immediately after); 1, 3-5, 7-12, 14, 15, 17 (practice)
8	2-5, 9, 10, 13, 14, 15, 17, 19 (race); 5 (immediately after); 1, 2, 4-17 (practice)	1, 3-16 (race); 1-3, 5 (immediately after); 1-13, 15, 16 (practice)
10	2, 4, 7, 8, 10, 12, 14, 18 (race); 3 (immediately after); 1, 3, 5-7, 9, 12, 13, 15, 16 (practice)	2-4, 6-8, 10, 12, 13, 15 (race); 3 (immediately after); 1, 3-7, 9, 12, 16 (practice)
11	3, 4, 5 (immediately after)	2, 11 (race); 1, 2, 9, 13 (practice)
13	2-5, 10-13, 15, 19 (race); 1-3, 5 (immediately after); 2-15, 17 (practice)	3-5, 14, 17-19 (race); 2, 7, 8 (practice)
14	1-6, 9, 10, 12, 14-16, 18 (race); 1-5 (immediately after); 1-9, 12, 13, 15, 17 (practice)	None
15	1, 2, 3, 10-12, 14-17 (race); 1, 2, 5 (immediately after); 1, 2, 3, 7, 9, 12, 13 (practice)	1, 3, 4, 15, 16 (race); 5 (immediately after); 4-6, 12, 15 (practice)
16	None	2 (race); 2, 3, 5, 13, 14, 16, 17 (practice)
17	7, 10, 12, 14 (race); 2 (immediately after); 8, 9 (practice)	7, 11 (race); 4 (immediately after); 12 (practice)
18	1-10, 12-15, 17, 18 (race); 1-3, 5 (immediately after); 4-8, 10-14, 17 (practice)	4, 6, 10, 14, 17 (race); 1, 2 (immediately after); 7, 8, 14 (practice)
19	12, 13 (race); 2 (immediately after); 4, 5, 10, 11, 14, 15 (practice)	None
20	7, 9, 10, 13, 17 (race); 1-5 (immediately after); 1-14, 16, 17 (practice)	17 (race); 2, 3, 5-7, 12 (practice)
21	1, 6, 8, 9, 12, 13, 15-17 (race); 2-5 (immediately after); 1-5, 7-15, 17 (practice)	7-10, 15 (race); 2, 5 (immediately after); 4-9, 11 (practice)
22	None	None
24	1, 2, 4-15, 17, 18 (race); 4 (immediately after); 1-17 (practice)	1, 2, 4, 7, 10, 13-16, 18 (race); 1-17 (practice)

Items which were rated highly (i.e., '7', '8', or '9') to the question "Is this something you need to improve on" on the first and second administration of the sport specific questionnaires for runners

S #	First Administration	Second Administration
25	1, 2, 4, 8, 10-13, 15-17 (race); 2-5 (immediately after); 1-9, 12, 13, 15 (practice)	1, 2, 7, 8, 10, 11, 13, 15-18 (race); 2, 3 (immediately after); 2-8 (practice)
27	2, 10-15, 18 (race); 1, 4 (immediately after); 1-7, 10-17 (practice)	4, 10, 12, 15, 18, 19 (race); 1, 3, 4 (immediately after); 1-7, 9-12, 14-17 (practice)
28	3, 4, 5, 9, 10, 12, 15 (race); 2 (immediately after); 2, 8, 11 (practice)	8 (practice)
29	10-12, 14-16, 18, 19 (race); 1, 4 (immediately after); 1-6, 8-11, 14-17 (practice)	4-6, 10-12, 14, 15, 18, 19 (race); 1, 2, 4, 5 (immediately after); 1-11, 14-17 (practice)
30	4, 6-8, 10, 12-14 (race); 2 (immediately after); 2, 5, 8, 16, 17 (practice)	3 (race)
31	1, 3-20 (race); 1-5 (immediately after); 1, 2, 6, 10-17 (practice)	1, 3, 4, 7-13, 15-17, 19, 20 (race); 1, 2, 4, 5 (immediately after); 1, 3, 6, 7, 8-10, 13-15, 17 (practice)
32	1, 2, 3, 10 (race); 8, 9, 11 (practice)	9, 10, 12, 13, 18 (race); 2 (immediately after); 1, 8, 9, 11, 12, 14, 16, 17 (practice)
34	2-7, 11, 12, 14, 16 (race); 2-5 (immediately after); 7-9, 11, 12-15, 17 (practice)	1, 2, 4, 11, 12, 16 (race); 3-5 (immediately after); 11, 12 (practice)
35	4, 8, 13, 20 (race); 2, 4 (immediately after); 2, 4, 5, 7, 8, 15, 16 (practice)	6-8, 13 (race); 2, 3, 5, 9, 12, 16 (practice)
37	1-3, 6-8, 10-12, 14-16, 18-20 (race); 1, 2, 4 (immediately after); 1-9, 11-13, 15-17 (practice)	4, 5, 7, 15, 18 (race); 1, 2 (immediately after); 1-11, 14-16 (practice)
38	1, 2, 8, 16, 17, 19 (race); 1, 4, 5, 8, 10, 12, 15, 17 (practice)	12, 15, 16 (practice)
39	5, 6, 7, 12, 14, 17, 18 (race); 1-4 (immediately after); 1, 3, 8-12, 14-17 (practice)	4, 7, 17-19 (race); 1, 2, 4, 5 (immediately after); 6, 7, 9-12 (practice)
40	1, 2, 5, 9, 10, 14, 15, 19 (race); 4, 5, 8 (practice)	1, 2, 7, 10, 15 (race); 2 (immediately after); 1, 5, 8, 9 (practice)
41	3, 5, 10, 11, 12, 14-16 (race); 1, 4, 5 (immediately after); 2-9, 17 (practice)	12 (race); 8 (practice)
42	15 (race)	3-9, 12-18, 19, 20 (race)
43	2-4, 7-13, 17 (race); 8, 11, 12, 14 (practice)	2, 3, 7, 10 (race)
44	1-4, 6, 7, 9, 11, 13-15, 19 (race); 1-3, 5 (immediately after); 1, 8, 9, 11-17 (practice)	10, 11, 14, 15 (race); 2, 3 (immediately after); 1, 3, 5, 7-9, 12, 14, 16, 17 (practice)
45	2, 10, 14-17 (race); 1, 2 (immediately after); 1-6, 9, 13, 15-17 (practice)	4, 10, 14, 15 (race); 2, 8, 10, 11, 12 (practice)
46	1, 4, 7, 12, 18 (race); 1, 2 (immediately after); 2, 4, 8, 10, 12, 13 (practice)	3, 4, 6, 7, 10, 12, 15, 17, 18 (race); 2, 8, 10, 11, 12 (practice)
47	1-5, 9, 11 (race); 1, 2, 4, 5, 7, 9, 10, 11, 12, 15-17 (practice)	2, 3 (race); 1 (immediately after); 2 (practice)
48	None	None

Appendix N

**Test-retest reliability of the sport specific questionnaire for
volleyball players and runners**

Test-Retest Reliability for Volleyball Players

Item	Competition	Immediately After	Practice
1	0.678**	0.305*	0.551**
2	0.665**	0.523**	0.366*
3	0.737**	0.453**	0.658**
4	0.646**	0.480**	0.668**
5	0.539**	0.579**	0.669**
6	0.648**		0.591**
7	0.596**		0.552**
8	0.221		0.421**
9	0.597**		0.552**
10	0.522**		0.351*
11	0.640**		0.554**
12	0.532**		0.673**
13	0.512**		0.557**
14	0.551**		0.690**
15	0.624**		0.764**
16	0.534**		0.550**
17	0.565**		0.493**
18	0.618**		
19	0.587**		
20	0.666**		
AVERAGE (all items = 0.781**)	0.839**	0.568**	0.743**

* = correlation is significant at the 0.05 level (1-tailed)

** = correlation is significant at the 0.01 level (1-tailed)

Test-Retest Reliability for University Volleyball Players

Item	Competition	Immediately After	Practice
1	.811**	.304	.532**
2	.795**	.829**	.792**
3	.754**	.721**	.790**
4	.686**	.479*	.861**
5	.523**	.700**	.793**
6	.547**		.585**
7	.645**		.647**
8	.247		.489*
9	.517**		.515**
10	.628**		.376*
11	.604**		.676**
12	.705**		.712**
13	.479*		.509**
14	.610**		.663**
15	.771**		.853**
16	.651**		.650**
17	.802**		.377*
18	.603**		
19	.383*		
20	.742**		
AVERAGE (All items = 894**)	.880**	.820**	.781**

* = correlation is significant at the 0.05 level (1-tailed)

** = correlation is significant at the 0.01 level (1-tailed)

Test-Retest Reliability for Highschool Volleyball Players

Item	Competition	Immediately After	Practice
1	.388	.259	.251
2	.504*	.225	.246
3	.700**	.097	.484*
4	.805**	.584*	.104
5	.611*	.380	.227
6	.613**		.644**
7	.673**		.402
8	.242		.337
9	.807**		.647**
10	.332		.312
11	.621**		.151
12	.243		.566*
13	.591*		.617**
14	.460*		.608*
15	.370		.368
16	.422		.656**
17	.160		
18	.529*		
19	.593*		
20	.545*		
AVERAGE (All items = 630**)	.843**	.248	.596*

* = correlation is significant at the 0.05 level (1-tailed)

** = correlation is significant at the 0.01 level (1-tailed)

Test-Retest Reliability for Runners

Item	Competition	Immediately After	Practice
1	0.458**	0.617**	0.430**
2	0.588**	0.422**	0.582**
3	0.554**	0.530**	0.500**
4	0.258*	0.565**	0.345*
5	0.169	0.477**	0.493**
6	0.257		0.581**
7	0.558**		0.593**
8	0.606**		0.569**
9	0.297*		0.242
10	0.435**		0.344*
11	0.443**		0.387**
12	0.378**		0.305*
13	0.362**		0.315*
14	0.374**		0.303*
15	0.342*		0.479**
16	0.471**		0.343*
17	0.436**		0.360**
18	0.402**		
19	0.553**		
20	0.270*		
AVERAGE (all items = 0.593**)	0.492**	0.615**	0.530**

* = correlation is significant at the 0.05 level (1-tailed)

** = correlation is significant at the 0.01 level (1-tailed)

Test-Retest Reliability for University Runners

Item	Competition	Immediately After	Practice
1	.477*	.502*	.521**
2	.465*	.193	.827**
3	.293	.520**	.584**
4	.144	.613**	.499*
5	.086	.442*	.429*
6	-.007		.700**
7	.763**		.465*
8	.659**		.438*
9	.070		.472*
10	.336		.463*
11	.748**		.545**
12	.449*		.290
13	.396*		.604**
14	.567**		.254
15	.458*		.683**
16	.660**		.301
17	.508*		.266
18	.401*		
19	.593**		
20	.272		
AVERAGE (All items = .665**)	.528**	.615**	.669**

* = correlation is significant at the 0.05 level (1-tailed)

** = correlation is significant at the 0.01 level (1-tailed)

Test-Retest Reliability for Highschool Runners

Item	Competition	Immediately After	Practice
1	.279	.749**	.161
2	.485	.463	.300
3	.674*	.712**	.260
4	.625*	.546*	-.176
5	.541*	.520*	.162
6	.577*		.171
7	.570*		.610*
8	.723**		.663**
9	.456		.265
10	.604*		.034
11	.393		.299
12	.581*		.202
13	.214		.143
14	.217		.459
15	-.044		.178
16	.348		.202
17	.462		.507*
18	.718**		
19	.909**		
20	.518*		
AVERAGE (All items = .608')	.627*	.689**	.296

* = correlation is significant at the 0.05 level (1-tailed)

** = correlation is significant at the 0.01 level (1-tailed)

Appendix O

Test-retest reliability of the sport specific questionnaire for
volleyball and running coaches

**Test-retest Reliability of the Sport Specific Questionnaire for
Volleyball Coaches**

Item	Competition	Immediately After	Practice
1	0.800**	0.358	0.522*
2	0.382	0.627**	0.336
3	0.762**	0.581**	0.687**
4	0.811**	0.624**	0.149
5	0.736**	0.638**	0.459*
6	0.838**		0.503*
7	0.525*		0.750**
8	0.404*		0.649**
9	0.807**		0.686**
10	0.540*		0.757**
11	0.618**		0.299
12	0.913**		0.753**
13	0.582**		0.683**
14	0.674**		0.545**
15	0.620**		0.508*
16	0.796**		0.646**
17	0.440*		0.470*
18	0.359		
19	0.554**		
20	0.557**		
AVERAGE All items = 0.882**	0.913**	0.804**	0.770**

* = correlation is significant at the 0.05 level (1-tailed)

** = is significant at the 0.01 level (1-tailed)

**Test-retest Reliability of the Sport Specific Questionnaire for
Running Coaches**

Item	Competition	Immediately After	Practice
1	0.495*	0.118	0.156
2	0.368	0.322	-0.089
3	0.296	-0.026	0.908**
4	0.312	0.187	0.689**
5	0.454*	0.248	0.794**
6	0.345		0.778**
7	0.462*		0.162
8	0.223		0.184
9	0.017		0.248
10	0.332		0.321
11	0.067		0.273
12	0.463*		0.429*
13	-0.082		0.169
14	0.430*		0.292
15	0.879**		0.309
16	0.499*		0.317
17	0.720**		0.295
18	0.423*		
19	-0.357		
20	0.223		
AVERAGE All items = 0.411*	0.453*	0.107	0.514*

* = correlation is significant at the 0.05 level (1-tailed)

** = is significant at the 0.01 level (1-tailed)

Appendix P

**Questionnaires to measure predictive validity for basketball
and swimming at practices**

definitely not
at all, no

to some extent
a bit, somewhat

definitely yes
a lot, yes

1

2

3

4

5

6

7

8

9

Name: _____

Date: _____

Self report form to be completed by basketball players immediately after a practice

Please answer this questionnaire immediately after your practice without discussing it with anyone else.

Your answers will be completely confidential and will not affect your position on the team in ANY way.

If a question says 'do not use the scale', then that question requires you to use a written response (i.e., do not use a scale, write out your answer). All other questions should be answered using the rating scale which is at the top of each page.

Answer the questions based on the practice you JUST finished. If a question does not apply to this practice leave it out.

Before practice

1. Did you think about what you would like to accomplish at this practice (e.g., keep your head up while dribbling, cut off the lane, etc.)? _____

2. Did you write these things down? _____

3. If you did think of things you wanted to accomplish during practice, what were they?

Do not use the scale.

4. Did you arrive with enough time to stretch and shoot around prior to the beginning of practice?

5. Did you arrive at practice focused and committed to doing your best? _____

6. Were you able to let go of things which were on your mind, such as an upcoming test, and totally focus on the practice? _____

While warming up for practice

1. While warming up, did you find that your mind wandered to things which don't involve basketball such as school or relationship problems? _____

2. Did you focus on the actual skill you were doing rather than thinking ahead to other parts of the practice? _____

During the first half of practice

1. When you had the opportunity, did you work on skills which you need to improve (e.g., left handed lay ups, blocking out, etc.)? _____

2. When practice began to drag (i.e., you were doing a boring drill), did you maintain your concentration on the task at hand? _____

3. When you did a skill correctly (e.g., made a three pointer) did you take a few seconds to remember what it felt like to 'do it right'? _____

4. Were you able to let it go after making a mistake and refocus on the next drill/play? (P15)

5. Did you use key words when doing specific skills such as "follow through" when shooting, "see the ball" when guarding the post, etc.? _____

What are some of the key words you used during the first half of practice?

Do not use the scale.

6. Did you focus on each drill you as you were doing it rather than thinking about other drills or other

definitely not
at all, no

to some extent
a bit, somewhat

definitely yes
a lot, yes

1 2 3 4 5 6 7 8 9

parts of the practice (e.g., when working on a block out drill, did you focus on finding your check, making contact, and finding the ball)? _____

7. Did you compare yourself to other players and how they were performing at practice? _____

If you didn't feel like being there (if you felt like being there the whole practice, do onto the next section)

8. Did you give 100% effort? _____

9. Did your mind wander to things you would rather be doing (e.g., sleeping, going on a date, watching a movie, doing homework, etc.)? _____

When practicing skills you always practice (e.g., ball handling, lay ups, blocking out)

10. Did you try to do the skills precisely and accurately (e.g., making sure you follow through on your shot)? _____

11. Did you imagine yourself performing the skills against defence or in an actual game in order to help you perfect the skill? _____

When scrimmaging (If you did not scrimmage during this practice, go onto the next section)

12. Did you try to make the situation as realistic as possible (e.g., imagining that you were checking the player you are going to check in the next game)? _____

13. Did you use mental imagery, self talk, or keywords before and during the scrimmage to try and make it as much like a real game as possible?

During downtime

14. Did you work on skills which you need to improve such as dribbling with your left hand, dribble jumpers, etc.? _____

15. Did you visualize skills which are more difficult to master? _____

If you had a bad practice

16. Did you try to focus on the small things that WERE going well? _____

If you were injured and could not practice, answer the next three questions

17. Did you try to focus on what you would do when you returned to practice and where you would be in the offensive and defensive plays? _____

18. Did you feel things such as hopelessness, anger, or frustration about your injury? _____

19. Did you try to think about the benefits about sitting out of practice such as returning to practice more rested, having additional time to really learn the offence, etc.? _____

During the second half of practice

1. When you had the opportunity, did you work on skills which you need to improve (e.g., left handed lay ups, blocking out, etc.)? _____

2. When practice began to drag (i.e., you were doing a boring drill), did you maintain your concentration on the task at hand? _____

3. When you did a skill correctly (e.g., made a three pointer) did you take a few seconds to remember what it felt like to 'do it right'? _____

4. Were you able to let it go after making a mistake and refocus on the next drill/play? _____

5. Did you use key words when doing specific skills such as "follow through" when shooting, "see the ball" when guarding the post, etc.? _____

What are some of the key words you used during the second half of practice?

Do not use the scale.

definitely not
not at all, no
1 2 3

to some extent
a bit, somewhat
4 5 6

definitely yes
a lot, yes
7 8 9

-
6. Did you focus on each drill you as you were doing it rather than thinking about other drills or other parts of the practice (e.g., when working on a block out drill, did you focus on finding your check, making contact, and finding the ball)? _____
7. Did you compare yourself to other players and how they were performing at practice? _____

If you didn't feel like being there

(If you felt like being there throughout the second half of practice, go onto the next section)

8. Did you give 100% effort? _____
9. Did your mind wander to things you would rather be doing (e.g., sleeping, going on a date, watching a movie, doing homework, etc.)? _____

When practicing skills you always practice (e.g., ball handling, lay ups, blocking out)

10. Did you try to do the skills precisely and accurately (e.g., making sure you follow through on your shot)? _____
11. Did you imagine yourself performing the skills against defence or in an actual game in order to help you perfect the skill? _____

When scrimmaging (if you did not scrimmage during the second half of practice, go onto the next section)

12. Did you try to make the situation as realistic as possible (e.g., imagining that you were checking the player you are going to check in the next game)? _____
13. Did you use mental imagery, self talk, or keywords before and during the scrimmage to try and make it as much like a real game as possible? _____

During downtime

14. Did you work on skills which you need to improve such as dribbling with your left hand, dribble jumpers, etc.? _____
15. Did you visualize skills which are more difficult to master? _____

If you had a bad practice

16. Did you try to focus on the small things that WERE going well? _____

If you were injured and could not practice, answer the next three questions

17. Did you try to focus on what you would do when you returned to practice and where you would be in the offensive and defensive plays? _____
18. Did you feel things such as hopelessness, anger, or frustration about your injury? _____
19. Did you try to think about the benefits about sitting out of practice such as returning to practice more rested, having additional time to really learn the offence, etc.? _____

Near the end of practice

20. Were you able to concentrate on and give 100% effort to the practice when it was almost over? _____

How would you rate your performance during this practice?

Awful, one of my
worst practices

Average

Amazing, one of
my best practices

1 2 3 4 5 6 7 8 9

definitely not
not at all, no
1 2

to some extent
a bit, somewhat
3 4 5 6

definitely yes
a lot, yes
7 8 9

Name of athlete: _____

Date: _____

Name of coach: _____

Self report form to be completed by basketball coaches immediately after a practice

Please answer this questionnaire immediately after practice without discussing it with anyone else, including the athlete which you are evaluating.

Your answers will be completely confidential.

Please answer each of the remaining questions using the rating scale which is at the top of each page. Some of the questions will be difficult to answer as it may be hard to determine if an athlete was using mental imagery, etc. Therefore, if you do not know the answer to a question, simply write "DK" (don't know) in the space provided or leave it blank.

Answer the questions based on the practice you JUST coached. If a question does not apply to this practice leave it out.

Before practice

1. Do you feel this athlete arrived at practice with enough time to stretch and shoot around prior to the beginning of practice? _____
2. Do you think this athlete arrived at practice focused and committed to doing their best? _____
3. In your opinion, was this athlete able to let go of things which were on their mind such as an upcoming test and totally focus on the practice? _____

While warming up for practice

1. Do you feel this athlete focused on the actual skill they were doing rather than thinking ahead to other parts of the practice? _____

During the first half of practice

1. Do you think this athlete worked on skills in which they needed to improve (e.g., left handed lay ups, blocking out, etc.) when they had the opportunity? _____
2. When practice began to drag (i.e., they were doing a boring drill), do you feel this athlete maintained their concentration on the task at hand? _____
3. Do you believe this athlete was able to "let it go" after making a mistake in the first half of practice and refocus on the next drill/play? _____
4. During the first half of practice, do you feel this athlete focused on each drill as they were doing it rather than thinking about other drills or other parts of the practice (e.g., when working on a block out drill did they focus on finding their check, making contact, and finding the ball)? _____
5. Do you think this athlete gave 100% effort throughout the entire 1st half of practice? _____

When practicing skills they always practice (e.g., ball handling, lay ups, blocking out)

6. In your opinion, did this athlete try to do the skills precisely and accurately (e.g., making sure they followed through on their shot)? _____

When scrimmaging (if there was no scrimmage during the first half of practice, go onto the next section)

7. Do you feel this athlete tried to make the situation as realistic as possible (e.g., play as hard as they would in an actual game)? _____

During downtime

8. Do you feel this athlete worked on skills which they needed to improve such as dribbling with their left hand, getting dribble jumpers off quickly, etc.? _____

definitely not
not at all, no

to some extent
a bit, somewhat

definitely yes
a lot, yes

1 2 3 4 5 6 7 8 9

During the second half of practice

1. Do you think this athlete worked on skills in which they needed to improve (e.g., left handed lay ups, blocking out, etc.) when they had the opportunity? _____
2. When practice began to drag (i.e., they were doing a boring drill), do you feel this athlete maintained their concentration on the task at hand? _____
3. Do you believe this athlete was able to "let it go" after making a mistake in the second half of practice and refocus on the next drill/play? _____
4. During the second half of practice, do you feel this athlete focused on each drill as they were doing it rather than thinking about other drills or other parts of the practice (e.g., when working on a block out drill did they focus on finding their check, making contact, and finding the ball)? _____
5. Do you think this athlete gave 100% effort throughout the entire 2nd half of practice? _____

When practicing skills they always practice (e.g., ball handling, lay ups, blocking out)

6. In your opinion, did this athlete try to do the skills precisely and accurately (e.g., making sure they followed through on their shot)? _____

When scrimmaging (if there was no scrimmage during the 2nd half of practice, go onto the next section)

7. Do you feel this athlete tried to make the situation as realistic as possible (e.g., play as hard as they would in an actual game)? _____

During downtime

8. Do you feel this athlete worked on skills which they needed to improve such as dribbling with their left hand, getting dribble jumpers off quickly, etc.? _____

Near the end of practice

9. Do you feel this athlete was able to concentrate on and give 100% effort to the practice when practice was almost over? _____

How would you rate this athlete's performance during this practice?

Awful, one of their
worst practices

Average

Amazing, one of
their best practices

1 2 3 4 5 6 7 8 9

definitely not
not at all, no
1 2

to some extent
a bit, somewhat
4 5

definitely yes
a lot, yes
8 9

Name: _____ **Stroke:** _____ **Date:** _____

Self report form to be completed by swimmers immediately after a practice

Please answer this questionnaire immediately after your practice without discussing it with anyone else. Your answers will be completely confidential and will not affect your position on the team in ANY way. If a question says 'do not use the scale', then that question requires you to use a written response (i.e., do not use a scale, write out your answer). All other questions should be answered using the rating scale which is at the top of each page.

Answer the questions based on the practice you JUST finished. If a question does not apply to this practice leave it out.

Before practice

1. Did you think about what you would like to accomplish at this practice (e.g., swimming all sets under a certain time, etc.)? _____
2. Did you write these things down? _____
3. If you did think of things you wanted to accomplish during practice, what were they?

Do not use the scale.

4. Did you arrive with enough time to stretch and loosen up prior to the beginning of practice? _____
5. Did you arrive at practice focused and committed to doing your best? _____
6. Were you able to let go of things which were on your mind, such as an upcoming test, and totally focus on the practice? _____

While warming up for practice

1. While warming up, did you find that your mind wandered to things which don't involve swimming such as school or relationship problems? _____
2. Did you focus on the actual skill you were doing rather than thinking ahead to other parts of the practice? _____

During the first half of practice

1. When you had the opportunity, did you work on skills which you need to improve (e.g., stroke technique, kick, turns, etc.)? _____
2. When practice began to drag, did you maintain your concentration on the task at hand? _____
3. When you did something really well, did you take a few seconds to remember what it felt like to 'do it right'? _____
4. Were you able to let it go after making a mistake and refocus on the next part of practice? _____
5. Did you use key words during practice such as "accelerate", "kick", "catch the water", etc.? _____

What are some of the key words you used during the first half of practice?

Do not use the scale.

6. Did you focus on each set as you were doing it, rather than thinking about other sets or other parts of the practice? _____

definitely not
not at all, no

to some extent
a bit, somewhat

definitely yes
a lot, yes

1 2 3 4 5 6 7 8 9

7. Did you compare yourself to other swimmers and how they were performing at practice? _____

If you didn't feel like being there

(if you felt like being there the whole first half of practice, go onto the next section)

8. Did you give 100% effort? _____

9. Did your mind wander to things you would rather be doing (e.g., sleeping, going on a date, watching a movie, doing homework, etc.)? _____

When practicing things you always practice

10. Did you try to do the strokes/turns precisely and accurately (e.g., practicing good turns at both ends)? _____

11. Did you imagine yourself swimming in an actual race in order to help you perfect the stroke? _____

When doing race simulations

(if you did not do a race simulation during the first half of this practice, go onto the next section)

12. Did you try to make the situation as realistic as possible (e.g., imagining that you were racing against someone you will compete against at the next meet)? _____

13. Did you use mental imagery, self talk, or keywords before and during the race to try and make it as much like a real game as possible? _____

During downtime

14. Did you work on strokes/turns which you need to improve? _____

15. Did you visualize strokes/turns which are more difficult to master? _____

If you had a bad first half of practice

16. Did you try to focus on the small things that WERE going well? _____

During the second half of practice

1. When you had the opportunity, did you work on skills which you need to improve (e.g., stroke technique, kick, turns, etc.)? _____

2. When practice began to drag, did you maintain your concentration on the task at hand? _____

3. When you did something really well, did you take a few seconds to remember what it felt like to 'do it right'? _____

4. Were you able to let it go after making a mistake and refocus on the next part of practice? _____

5. Did you use key words during practice such as "accelerate", "kick", "catch the water", etc.? _____

What are some of the key words you used during the second half of practice?

Do not use the scale.

6. Did you focus on each set as you were doing it, rather than thinking about other sets or other parts of the practice? _____

7. Did you compare yourself to other swimmers and how they were performing at practice? _____

definitely not
not at all, no

to some extent
a bit, somewhat

definitely yes
a lot, yes

1 2 3 4 5 6 7 8 9

If you didn't feel like being there

(if you felt like being there the whole second half of practice, go onto the next section)

8. Did you give 100% effort? _____
9. Did your mind wander to things you would rather be doing (e.g., sleeping, going on a date, watching a movie, doing homework, etc.)? _____

When practicing things you always practice

10. Did you try to do the strokes/turns precisely and accurately (e.g., practicing good turns at both ends)? _____
11. Did you imagine yourself swimming in an actual race in order to help you perfect the stroke? _____

When doing race simulations

(If you did not do a race simulation during the second half of this practice, go onto the next section)

12. Did you try to make the situation as realistic as possible (e.g., imagining that you were racing against someone you will compete against at the next meet)? _____
13. Did you use mental imagery, self talk, or keywords before and during the race to try and make it as much like a real game as possible? _____

During downtime

14. Did you work on strokes/turns which you need to improve? _____
15. Did you visualize strokes/turns which are more difficult to master? _____

If you had a bad second half of practice

16. Did you try to focus on the small things that WERE going well? _____

If you were injured and could not practice, answer the next three questions

17. Did you try to focus on what you would do when you returned to practice? _____
18. Did you feel things such as hopelessness, anger, or frustration about your injury? _____
19. Did you try to think about the benefits of sitting out of practice such as returning to practice more rested, having additional time to really learn a new stroke, etc.? _____

Near the end of practice

20. Were you able to concentrate on and give 100% effort to the practice when it was almost over?

How would you rate your performance during this practice?

Awful, one of my
worst practices

Average

Amazing, one of
my best practices

1 2 3 4 5 6 7 8 9

definitely not				to some extent				definitely yes
not at all, no				a bit, somewhat				a lot, yes
1	2	3	4	5	6	7	8	9

Name of athlete: _____ **Date:** _____

Stroke: _____ **Name of coach:** _____

Self report form to be completed by swimming coaches immediately after a practice

Please answer this questionnaire immediately after practice without discussing it with anyone else, including the athlete which you are evaluating.

Your answers will be completely confidential.

Please answer each of the remaining questions using the rating scale which is at the top of each page. Some of the questions will be difficult to answer as it may be hard to determine if an athlete was using mental imagery, etc. Therefore, if you do not know the answer to a question, simply write "DK" (don't know) in the space provided or leave it blank.

Answer the questions based on the practice you JUST coached. If a question does not apply to this practice leave it out.

Before practice

1. Do you feel this athlete arrived at practice with enough time to stretch and loosen up prior to the beginning of practice? _____
2. Do you think this athlete arrived at practice focused and committed to doing their best? _____
3. In your opinion, was this athlete able to let go of things which were on their mind such as an upcoming test and totally focus on the practice? _____

While warming up for practice

1. Do you feel this athlete focused on the actual skill they were doing rather than thinking ahead to other parts of the practice? _____

During the first half of practice

1. Do you think this athlete worked on skills in which they needed to improve (e.g., stroke technique, kicks, turns, etc.) when they had the opportunity? _____
2. When practice began to drag (i.e., they were doing a boring drill), do you feel this athlete maintained their concentration on the task at hand? _____
3. Do you believe this athlete was able to "let it go" after making a mistake and refocus on the next part of practice? _____
4. During the first half of practice, do you feel this athlete focused on each set as they were doing it, rather than thinking about other sets or other parts of the practice? _____
5. Do you think this athlete gave 100% effort throughout the entire 1st half of practice? _____

When practicing skills they always practice

6. In your opinion, did this athlete try to do the strokes/turns precisely and accurately (e.g., practicing good turns at both ends)? _____

When doing race simulations (if there were no race simulations during the first half of practice, go onto the next section)

7. Do you feel this athlete tried to make the situation as realistic as possible (e.g., imagine that they were racing against someone whom they race against at the next meet)? _____

During downtime

8. Do you feel this athlete worked on skills which they needed to improve such as specific stroke and turn technique(s)? _____

definitely not
not at all, no

to some extent
a bit, somewhat

definitely yes
a lot, yes

1 2 3 4 5 6 7 8 9

During the second half of practice

1. Do you think this athlete worked on skills in which they needed to improve (e.g., stroke technique, kicks, turns, etc.) when they had the opportunity? _____
2. When practice began to drag (i.e., they were doing a boring drill), do you feel this athlete maintained their concentration on the task at hand? _____
3. Do you believe this athlete was able to "let it go" after making a mistake and refocus on the next part of practice? _____
4. During the second half of practice, do you feel this athlete focused on each set as they were doing it, rather than thinking about other sets or other parts of the practice? _____
5. Do you think this athlete gave 100% effort throughout the entire 2nd half of practice? _____

When practicing skills they always practice

6. In your opinion, did this athlete try to do the strokes/turns precisely and accurately (e.g., practicing good turns at both ends)? _____

When doing race simulations (if there were no race simulations during the second half of practice, go onto the next section)

7. Do you feel this athlete tried to make the situation as realistic as possible (e.g., imagine that they were racing against someone whom they race against at the next meet)? _____

During downtime

8. Do you feel this athlete worked on skills which they needed to improve such as specific stroke and turn technique(s)? _____

Near the end of practice

9. Do you feel this athlete was able to concentrate on and give 100% effort to the practice when practice was almost over? _____

How would you rate this athlete's performance during this practice?

Awful, one of their
worst practices

Average

Amazing, one of
their best practices

1 2 3 4 5 6 7 8 9

Appendix Q

**Questionnaires to measure predictive validity for basketball
and swimming at games/races**

Scale A:								
hindered			no effect					helped
my performance			on my performance					my performance
1	2	3	4	5	6	7	8	9
Scale B:								
definitely not			to some extent					definitely yes
not at all, no			a bit, somewhat					a lot, yes
1	2	3	4	5	6	7	8	9

Name: _____

Date: _____

Self report form to be completed by basketball players immediately after a game

Please answer this questionnaire immediately after your game without discussing it with anyone else. Your answers will be completely confidential and will not affect your position on the team in ANY way. Please answer the questions using the appropriate scale. At the end of each question it will tell you which scale to use (i.e., either A or B). If no scale is indicated, then that question requires you to use a written response (i.e., do not use a scale, write out your answer). Answer the questions based on the game you JUST finished. If a question does not apply to this game leave it out.

The night before the game

1. The night before the game, did you think of things you would like to accomplish during the game such as scoring a certain number of points, holding your check to a certain number of points, calling cutters when playing zone defence, etc.? (Scale B) _____
2. Did you write these things down? (Scale B) _____
3. If you did think of things you'd like to accomplish during this game, what were they?

4. Approximately how much sleep (in hours) did you get the night before this game?

5. What impact do you feel this amount of sleep had on your game performance?
(Scale A) _____

6. What did you eat the night before this game?

7. How do you think what you ate affected your performance during the game?
(Scale A) _____

8. How much water (in glasses) did you drink the day before the game? _____

9. How do you think the amount of water you drank the day prior to the game affected your performance during the game? (Scale A) _____

10. The night before the game, did you follow a standard mental preparation routine which lasted at least 5 minutes and included things such as visualizing how to react to certain plays and deep breathing?
(Scale B) _____

11. If you did follow a standard mental preparation routine, what did it consist of?

12. If followed a mental preparation routine, how do you think this routine affected your performance?
(Scale A) _____

13. If you did follow a routine were you able to tell other people such as parents and friends what your routine was so that they gave you space and did not interfere? (Scale B) _____

		Scale A:						
hindered my performance		no effect on my performance						helped my performance
1	2	3	4	5	6	7	8	9
		Scale B:						
definitely not not at all, no		to some extent a bit, somewhat						definitely yes a lot, yes
1	2	3	4	5	6	7	8	9

During Warmup

1. Did you think about what people might say if you lost? (Scale B) _____
 2. How do you think this affected your performance? (Scale A) _____
 3. Did you think positive thoughts such as "I'm going to crash the boards", "Focus on the rim"? (Scale B) _____
- What are some examples of the positive self talk you used during warmup?
-
-

4. How do you think this affected your performance? (Scale A) _____
5. During warmup, did you think about things that don't involve basketball such as school, family, or relationship problems? (Scale B) _____
6. How do you think this affected your performance? (Scale A) _____

If you had a Bad Warmup (if you did not have a bad warmup, go onto the next section)

7. Overall, how do you feel it affected your performance in the game? (Scale A) _____
8. Did you find it difficult to stay energized? (Scale B) _____
9. Were you able to let it go and focus on the game? (Scale B) _____
10. Did you remain confident in your abilities as a basketball player? (Scale B) _____

During the 1st half

1. During the 1st half, did you give 100% effort if:
(answer these questions only if these things happened during THIS game)
 - (a) You were losing by a large margin? (Scale B) _____
 - (b) You were playing against a team you play often? (Scale B) _____
 2. During the 1st half, did you focus on anything in particular when shooting? If so, what?

 3. How do you feel this affected your performance? (Scale A) _____
 4. During the 1st half, did you focus on anything in particular when making a pass? If so, what?

 5. How do you feel this affected your performance? (Scale A) _____
 6. During the 1st half, did you think about winning the game? (Scale B) _____
 7. During the first half, did you think about things such as:
 - (a) I played poorly against this team last time? (Scale B) _____
 - (b) I'm feeling very sore/tired? (Scale B) _____
 - (c) I hate this gym? (Scale B) _____
 - (d) These rims suck? (Scale B) _____
 8. During the first half, did you think about what people might say if you lost? (Scale B) _____
 9. During the first half, did you think positive thoughts such as "I'm going to crash the boards", "Focus on the rim"? (Scale B) _____
- What are some examples of the positive self talk you used during the first half?
-
-

Scale A:

hindered my performance			no effect on my performance			helped my performance		
1	2	3	4	5	6	7	8	9

Scale B:

definitely not not at all, no			to some extent a bit, somewhat			definitely yes a lot, yes		
1	2	3	4	5	6	7	8	9

-
10. How do you think these positive thoughts affected your performance? (Scale A) _____
11. During the 1st half, did you think about things that don't involve basketball such as school, family, or relationship problems? (Scale B) _____
12. How do you think such thoughts affected your performance? (Scale A) _____
13. During the 1st half, how nervous or anxious did you feel? (Scale B) _____
14. How do you feel this level of nervousness affected your performance? (Scale A) _____
15. During the 1st half, did you drive if your opponent was too close? (Scale B) _____
16. During the 1st half, did you shoot when you were open? (Scale B) _____
17. When you had a step on your opponent, did you take the ball to the hole? (Scale B) _____
18. During the 1st half, did you make adjustments such as modifying your shot if it wasn't going in and making bounce passes if they took away lane, etc.? (Scale B) _____
19. When a teammate was subbed off after making a mistake, did you show them your support? (Scale B) _____
- How did you show them your support?
-
-

20. When a teammate made a good play (e.g., gets a steal, scores a hoop, etc.), did you show them your support? (Scale B) _____
- How did you show them your support?
-
-

21. During the 1st half, did you call out to your teammates when you switched offences or defences? (Scale B) _____
22. Did you communicate to your teammates if you felt you were open and not getting the ball? (Scale B) _____
23. Did you call out to your teammates when playing a zone defence (e.g., cutter, help side, etc.)? (Scale B) _____

If you made a mistake during the 1st half (e.g., you missed a box out, foul shot, or breakaway lay up). If you cannot remember making a mistake during the first half, go onto the next section.

24. Overall how did it affect your performance in the next few minutes of play? (Scale A) _____
25. Did you feel so mad that it affected your performance in the next few minutes of play? (Scale B) _____
26. Did you find it difficult to stay energized for the next few plays?(Scale B) _____
27. Were you able to let it go and refocus on the next play? (Scale B) _____
28. Did you remain confident in your abilities as a basketball player? (Scale B) _____

If a referee made a bad call during the first half (If you do not remember the referee making a bad call during the first half, go onto the next section)

Scale A:

hindered my performance no effect on my performance helped my performance
1 2 3 4 5 6 7 8 9

Scale B:

definitely not to some extent definitely yes
not at all, no a bit, somewhat a lot, yes
1 2 3 4 5 6 7 8 9

- 29. Overall how did it affect your performance in the next few minutes of play? (Scale A) _____
- 30. Did you feel so mad that it affected your performance in the next few minute of play?
(Scale B) _____
- 31. Did you find it difficult to stay energized for the next few plays? (Scale B) _____
- 32. Were you able to let it go and refocus on the next play? (Scale B) _____
- 33. Did you remain confident in your abilities as a basketball player? (Scale B) _____

If another player used trash talk during the first half (If you do not remember using trash talk during the first half, go onto the next section)

- 34. Overall how did it affect your performance in the next few minutes of play? (Scale A) _____
- 35. Did you feel so mad that it affected your performance in the next few minute of play?
(Scale B) _____
- 36. Did you find it difficult to stay energized for the next few plays? (Scale B) _____
- 37. Were you able to let it go and refocus on the next play? (Scale B) _____
- 38. Did you remain confident in your abilities as a basketball player? (Scale B) _____

At half time

- 1. Did you think about what people might say if you lost? (Scale B) _____
 - 2. How do you think this affected your performance? (Scale A) _____
 - 3. Did you think positive thoughts such as "I'm going to crash the boards", "Focus on the rim"?
(Scale B) _____
- What are some examples of the positive self talk you used during half time?

- 4. How do you think this affected your performance? (Scale A) _____
- 5. During half time, did you think about things that don't involve basketball such as school, family, or relationship problems? (Scale B) _____
- 6. How do you think this affected your performance? (Scale A) _____

If You Had a Bad First Half (If you did not have a bad first half in this game, go onto the next section)

- 7. Overall, how much do you think this affected your performance in the second half?
(Scale A) _____
- 8. Did you find it difficult to stay energized? (Scale B) _____
- 9. Were you able to let it go and refocus on the next half?(Scale B) _____
- 10. Did you remain confident in your abilities as a basketball player? (Scale B) _____
- 11. Did you feel so angry or so disappointed that it affected your performance?(Scale B) _____

During the 2nd half

- 1. During the 2nd half, did you give 100% effort if: (answer these questions only if these things happened during THIS game)
 - (a) You were losing by a large margin? (Scale B) _____
 - (b) You were playing against a team you play often? (Scale B) _____
- 2. During the 2nd half, did you focus on anything in particular when shooting? If so, what?

Scale A:								
hindered my performance			no effect on my performance					helped my performance
1	2	3	4	5	6	7	8	9
Scale B:								
definitely not not at all, no			to some extent a bit, somewhat					definitely yes a lot, yes
1	2	3	4	5	6	7	8	9

3. How do you feel this affected your performance? (Scale A) _____
4. During the 2nd half, did you focus on anything in particular when making a pass? If so, what?

5. How do you feel this affected your performance? (Scale A) _____
6. During the 2nd half, did you think about winning the game? (Scale B) _____
7. During the second half, did you think about things such as:
- (a) I played poorly against this team last time? (Scale B) _____
- (b) I'm feeling very sore/tired? (Scale B) _____
- (c) I hate this gym? (Scale B) _____
- (d) These rims suck? (Scale B) _____
8. During the second half, did you think about what people might say if you lost? (Scale B) _____
9. During the second half, did you think positive thoughts such as "I'm going to crash the boards", "Focus on the rim"? (Scale B) _____
- What are some examples of the positive self talk you used during the second half?

10. How do you think these positive thoughts affected your performance? (Scale A) _____
11. During the 2nd half, did you think about things that don't involve basketball such as school, family, or relationship problems? (Scale B) _____
12. How do you think such thoughts affected your performance? (Scale A) _____
13. During the 2nd half, how nervous or anxious did you feel? (Scale B) _____
14. How do you feel this level of nervousness affected your performance? (Scale A) _____
15. During the 2nd half, did you drive if your opponent was too close? (Scale B) _____
16. During the 2nd half, did you shoot when you were open? (Scale B) _____
17. When you had a step on your opponent, did you take the ball to the hole? (Scale B) _____
18. During the 2nd half, did you make adjustments such as modifying your shot if it wasn't going in and making bounce passes if they took away lane, etc.? (Scale B) _____
19. When a teammate was subbed off after making a mistake, did you show them your support? (Scale B) _____
- How did you show them your support?

20. When a teammate made a good play (e.g., gets a steal, scores a hoop, etc.), did you show them your support? (Scale B) _____

How did you show them your support?

21. During the 2nd half, did you call out to your teammates when you switched offences or defences? (Scale B) _____

Scale A:

hindered my performance				no effect on my performance				helped my performance
1	2	3	4	5	6	7	8	9

Scale B:

definitely not not at all, no				to some extent a bit, somewhat				definitely yes a lot, yes
1	2	3	4	5	6	7	8	9

22. Did you communicate to your teammates if you felt you were open and not getting the ball? (Scale B) _____
23. Did you call out to your teammates when playing a zone defence (e.g., cutter, help side, etc.)? (Scale B) _____

If you made a mistake during the 2nd half (e.g., you missed a box out, foul shot, or breakaway lay up). If you cannot remember making a mistake during the second half, go onto the next section.

24. Overall how did it affect your performance in the next few minutes of play? (Scale A) _____
25. Did you feel so mad that it affected your performance in the next few minutes of play? (Scale B) _____
26. Did you find it difficult to stay energized for the next few plays? (Scale B) _____
27. Were you able to let it go and refocus on the next play? (Scale B) _____
28. Did you remain confident in your abilities as a basketball player? (Scale B) _____

If a referee made a bad call during the second half (If you do not remember the referee making a bad call during the second half, go onto the next section)

29. Overall how did it affect your performance in the next few minutes of play?(Scale A) _____
30. Did you feel so mad that it affected your performance in the next few minute of play? (Scale B) _____
31. Did you find it difficult to stay energized for the next few plays? (Scale B) _____
32. Were you able to let it go and refocus on the next play? (Scale B) _____
33. Did you remain confident in your abilities as a basketball player? (Scale B) _____

If another player used trash talk during the second half (If you do not remember using trash talk during the second half, go onto the next section)

34. Overall how did it affect your performance in the next few minutes of play? (Scale A) _____
35. Did you feel so mad that it affected your performance in the next few minute of play? (Scale B) _____
36. Did you find it difficult to stay energized for the next few plays? (Scale B) _____
37. Were you able to let it go and refocus on the next play? (Scale B) _____
38. Did you remain confident in your abilities as a basketball player? (Scale B) _____

If the game was close in the final minutes (if this game was not close in the final minutes, go onto the next section)

39. Did you think about what people might say if you lost? (Scale B) _____
40. Did you remain confident in your abilities as a basketball player? (Scale B) _____
41. How nervous or anxious were you?(Scale B) _____
42. How do you feel this level of nervousness affected your performance during the last few minutes of the game? (Scale A) _____
43. Did you hide from the ball? (Scale B) _____

Immediately after the game

1. Apart from completing this questionnaire, did you spend at least 5 minutes evaluating your mental

Scale A:

hindered my performance no effect on my performance helped my performance
1 2 3 4 5 6 7 8 9

Scale B:

definitely not at all, no to some extent to some extent a bit, somewhat definitely yes a lot, yes
1 2 3 4 5 6 7 8 9

preparation for this game? (Scale B) _____

2. If you had a poor performance, did you consciously let go of it so that you could focus on the next game? (Scale B) _____

3. Did you spend at least 5 minutes thinking about the good things that happened and how you could incorporate them into the next game? (Scale B) _____

4. Did you discuss the good and bad parts of the game with your coach in order to find out what to improve upon in the next game? (Scale B) _____

5. Did you try to learn from the bad things that happened in order to improve in the next game? (Scale B) _____

How would you rate your performance during this game?

Awful, one of my worst games Average Amazing, one of my best games
1 2 3 4 5 6 7 8 9

Scale A:

hindered their performance no effect on their performance helped their performance
1 2 3 4 5 6 7 8 9

Scale B:

definitely not to some extent definitely yes
not at all, no a bit, somewhat a lot, yes
1 2 3 4 5 6 7 8 9

Name of athlete: _____

Date: _____

Name of coach: _____

Self report form to be completed by basketball coaches immediately after a game

Please answer this questionnaire immediately after the game without discussing it with anyone else, including the player whom you are evaluating. Your answers will be completely confidential.

Please answer the questions using the appropriate scale. At the end of each question it will tell you which scale to use (i.e., either A or B).

Some of the questions will be difficult to answer as it may be hard to determine if an athlete was nervous, using mental imagery, etc. Therefore, if you do not know the answer to a question, simply write "DK" (don't know) in the space provided or leave it blank.

Answer the questions based on the game you JUST coached. If a question does not apply to this game leave it out.

Last 2 hours before the game

1. Approximately two hours before the game, did you feel this athlete thought of things they would like to accomplish during the game such as scoring a certain number of points, holding their check to a certain number of points, calling cutters when playing zone defence, etc.? (Scale B) _____
2. Do you think they wrote these things down? (Scale B) _____
3. Approximately two hours before the game, do you think this player followed a standard routine which lasted at least 5 minutes and included things such as visualizing how to react to certain plays and deep breathing? (Scale B) _____
4. If they did follow a routine, how do you think this routine affected their performance? (Scale A) _____
5. If they did follow a routine do you think they were able to tell other people such as parents and friends what their routine was so that others didn't interfere with this routine? (Scale B) _____

During Warmup

1. How nervous or anxious do you feel this athlete was during the warmup? (Scale B) _____
2. How do you feel this level of nervousness affected their performance? (Scale A) _____
3. During warmup, do you think this athlete was thinking about things that don't involve basketball such as school, family, or relationship problems? (Scale B) _____
4. How do you think this affected their performance? (Scale A) _____

If this athlete had a Bad Warmup

(If this athlete did not have a bad warmup, go onto the next section)

5. Overall, how do you feel it affected their performance in the game? (Scale A) _____
6. Do you think they found it difficult to stay energized? (Scale B) _____
7. Do you think they were able to let it go and focus on the game? (Scale B) _____
8. Do you think they remained confident in their abilities as a basketball player? (Scale B) _____

Scale A:

hindered
their performance

1 2 3 4 5 6 7 8 9

no effect
on their performance

helped
their performance

Scale B:

definitely not
not at all, no

1 2 3 4 5 6 7 8 9

to some extent
a bit, somewhat

definitely yes
a lot, yes

During the 1st half

1. During the 1st half, did they give 100% effort if:
(answer these questions only if these things happened during THIS game)
- (a) The team was losing by a large margin? (Scale B) _____
- (b) The team was playing against a team they play often? (Scale B) _____
2. During the 1st half, do you feel this player was thinking about things that don't involve basketball such as school, family, or relationship problems? (Scale B) _____
3. How do you think this affected their performance? (Scale A) _____
4. During the 1st half, how nervous or anxious did you feel this athlete was? (Scale B) _____
5. How do you feel this level of nervousness affected their performance? (Scale A) _____
6. During the 1st half, did this player drive if their opponent was too close? (Scale B) _____
7. During the 1st half, did this player shoot when they were open? (Scale B) _____
8. When they had a step on their opponent, did they take the ball to the hole? (Scale B) _____
9. During the 1st half, did this player make adjustments such as modifying their shot if it wasn't going in and making bounce passes if the opponents took away lane, etc.? (Scale B) _____
10. When a teammate was subbed off after making a mistake, did this player show them their support? (Scale B) _____
11. When a teammate made a good play (e.g., got a steal, scored a hoop, etc.), did this player show them their support? (Scale B) _____
12. During the 1st half, did this player call out to their teammates when the team switched offences or defences? (Scale B) _____
13. Did this player communicate to their teammates if they felt they were open and not getting the ball? (Scale B) _____
14. Did this player communicate to their teammates when playing a zone defence (e.g., cutter, help side, etc.)? (Scale B) _____

If this player made a mistake during the 1st half (e.g., they missed a box out, foul shot, or breakaway lay up).

If you cannot remember this player making a mistake during the first half, go onto the next section.

15. Overall how did it affect their performance in the next few minutes of play? (Scale A) _____
16. How mad or frustrated did this player look? (Scale B) _____
17. How do you feel this level of emotion affected their play in the next few minutes of the game? (Scale A) _____
18. Do you feel this player found it difficult to stay energized? (Scale B) _____
19. Do you feel this player was able to let it go and refocus on the next play? (Scale B) _____
20. Do you feel this player remained confident in their abilities as a basketball player? (Scale B) _____

If a referee made a bad call during the first half

If you cannot remember this player receiving a bad call during the first half, go onto the next section.

21. Overall how did it affect their performance in the next few minutes of play? (Scale A) _____

Scale A:

hindered their performance no effect on their performance helped their performance
1 2 3 4 5 6 7 8 9

Scale B:

definitely not to some extent definitely yes
not at all, no a bit, somewhat a lot, yes
1 2 3 4 5 6 7 8 9

22. How mad or frustrated did this player look? (Scale B) _____
23. How do you feel this level of emotion affected their play in the next few minutes of the game? (Scale A) _____
24. Do you feel this player found it difficult to stay energized? (Scale B) _____
25. Do you feel this player was able to let it go and refocus on the next play? (Scale B) _____
26. Do you feel this player remained confident in their abilities as a basketball player? (Scale B) _____

If another player used trash talk during the first half

If you cannot remember someone trash talking to this player during the first half, go onto the next section.

27. Overall how did it affect their performance in the next few minutes of play? (C9) (Scale A) _____
28. How mad or frustrated did this player look? (Scale B) _____
29. How do you feel this level of emotion affected their play in the next few minutes of the game? (Scale A) _____
30. Do you feel this player found it difficult to stay energized? (Scale B) _____
31. Do you feel this player was able to let it go and refocus on the next play? (Scale B) _____
32. Do you feel this player remained confident in their abilities as a basketball player? (Scale B) _____

At half time

If this player had a Bad First Half

If this player did not have a bad first half, go onto the next section.

1. Overall how did it affect their performance in the next half? (Scale A) _____
2. How mad or frustrated did this player look? (Scale B) _____
3. How do you feel this level of emotion affected their play in the next half? (Scale A) _____
4. Do you feel this player found it difficult to stay energized? (Scale B) _____
5. Do you feel this player was able to let it go and refocus on the next half? (Scale B) _____
6. Do you feel this player remained confident in their abilities as a basketball player? (Scale B) _____

During the 2nd half

1. During the 2nd half, did they give 100% effort if:
(answer these questions only if these things happened during THIS game)
- (a) The team was losing by a large margin? (Scale B) _____
- (b) The team was playing against a team they play often? (Scale B) _____
2. During the 2nd half, do you feel this player was thinking about things that don't involve basketball such as school, family, or relationship problems? (Scale B) _____
3. How do you think this affected their performance? (Scale A) _____
4. During the 2nd half, how nervous or anxious did you feel this athlete was? (Scale B) _____
5. How do you feel this level of nervousness affected their performance? (Scale A) _____

Scale A:

hindered their performance				no effect on their performance				helped their performance
1	2	3	4	5	6	7	8	9

Scale B:

definitely not not at all, no				to some extent a bit, somewhat				definitely yes a lot, yes
1	2	3	4	5	6	7	8	9

6. During the 2nd half, did this player drive if their opponent was too close? (Scale B) _____
7. During the 2nd half, did this player shoot when they were open? (Scale B) _____
8. When they had a step on their opponent, did they take the ball to the hole? (Scale B) _____
9. During the 2nd half, did this player make adjustments such as modifying their shot if it wasn't going in and making bounce passes if the opponents took away lane, etc.? (Scale B) _____
10. When a teammate was subbed off after making a mistake, did this player show them their support? (Scale B) _____
11. When a teammate made a good play (e.g., got a steal, scored a hoop, etc.), did this player show them their support? (Scale B) _____
12. During the 2nd half, did this player call out to their teammates when the team switched offences or defences? (Scale B) _____
13. Did this player communicate to their teammates if they felt they were open and not getting the ball? (Scale B) _____
14. Did this player communicate to their teammates when playing a zone defence (e.g., cutter, help side, etc.)? (Scale B) _____

If this player made a mistake during the 2nd half (e.g., they missed a box out, foul shot, or breakaway lay up).

If you cannot remember this player making a mistake during the second half, go onto the next section.

15. Overall how did it affect their performance in the next few minutes of play? (Scale A) _____
16. How mad or frustrated did this player look? (Scale B) _____
17. How do you feel this level of emotion affected their play in the next few minutes of the game? (Scale A) _____
18. Do you feel this player found it difficult to stay energized? (Scale B) _____
19. Do you feel this player was able to let it go and refocus on the next play? (Scale B) _____
20. Do you feel this player remained confident in their abilities as a basketball player? (Scale B) _____

If a referee made a bad call during the second half

If you cannot remember this player receiving a bad call during the second half, go onto the next section.

21. Overall how did it affect their performance in the next few minutes of play? (Scale A) _____
22. How mad or frustrated did this player look? (Scale B) _____
23. How do you feel this level of emotion affected their play in the next few minutes of the game? (Scale A) _____
24. Do you feel this player found it difficult to stay energized? (Scale B) _____
25. Do you feel this player was able to let it go and refocus on the next play? (Scale B) _____
26. Do you feel this player remained confident in their abilities as a basketball player? (Scale B) _____

If another player used trash talk during the second half

If you cannot remember someone trash talking to this player during the second half, go onto the next

Scale A:

hindered their performance no effect on their performance helped their performance
1 2 3 4 5 6 7 8 9

Scale B:

definitely not not at all, no to some extent a bit, somewhat definitely yes a lot, yes
1 2 3 4 5 6 7 8 9

section.

- 27. Overall how did it affect their performance in the next few minutes of play? (Scale A) _____
- 28. How mad or frustrated did this player look? (Scale B) _____
- 29. How do you feel this level of emotion affected their play in the next few minutes of the game? (Scale A) _____
- 30. Do you feel this player found it difficult to stay energized? (Scale B) _____
- 31. Do you feel this player was able to let it go and refocus on the next play? (Scale B) _____
- 32. Do you feel this player remained confident in their abilities as a basketball player? (Scale B) _____

If the game was close in the final minutes

If the game was not close in the final minutes, do not answer this question.

- 33. Do you feel this player thought about what people might say if the team lost? (Scale B) _____
- 34. Do you feel this player remained confident in their abilities as a basketball player? (Scale B) _____
- 35. How nervous or anxious do you feel this player was? (Scale B) _____
- 36. How do you feel this level of nervousness affected their performance during the last few minutes of the game? (Scale A) _____
- 37. Do you feel this player hid from the ball? (Scale B) _____

Immediately after the game

- 1. Apart from completing this questionnaire, do you think this player spent at least 5 minutes evaluating their mental preparation for this game? (Scale B) _____
- 2. Did this player discuss the good and bad parts of this game with you in order to find out what to improve upon in the next game? (Scale B) _____

How would you rate this athlete's performance during this game?

Awful, one of their worst games Average Amazing, one of their best games
1 2 3 4 5 6 7 8 9

Scale A:

hindered my performance				no effect on my performance				helped my performance
1	2	3	4	5	6	7	8	9

Scale B:

definitely not not at all, no				to some extent a bit, somewhat				definitely yes a lot, yes
1	2	3	4	5	6	7	8	9

Name: _____ **Stroke:** _____ **Date:** _____

Self report form to be completed by swimmers immediately after a race

Please answer this questionnaire immediately after your race without discussing it with anyone else. Your answers will be completely confidential and will not affect your position on the team in ANY way. Please answer the questions using the appropriate scale. At the end of each question it will tell you which scale to use (i.e., either A or B). If no scale is indicated, then that question requires you to use a written response (i.e., do not use a scale, write out your answer).

Answer the questions based on the race you JUST finished. If a question does not apply to this race leave it out.

The night before the race

1. The night before the race, did you think of things you would like to accomplish during the race such as getting certain splits, having good stroke technique, great turns, etc.? (Scale B) _____
2. Did you write these things down? (Scale B) _____
3. If you did think of things you'd like to accomplish during this race, what were they?

4. Approximately how much sleep (in hours) did you get the night before this race?

5. What impact do you feel this amount of sleep had on your race performance? (C17)
(Scale A) _____

6. What did you eat the night before this race?

7. How do you think what you ate affected your performance during the race?)
(Scale A) _____

8. How much water (in glasses) did you drink the day before the race? _____

9. How do you think the amount of water you drank the day prior to the race affected your performance during the race? (Scale A) _____

10. The night before the race, did you follow a standard mental preparation routine which lasted at least 5 minutes and included things such as visualizing how to react to certain plays and deep breathing?
(Scale B) _____

11. If you did follow a standard mental preparation routine, what did it consist of?

12. If followed a mental preparation routine, how do you think this routine affected your performance?
(Scale A) _____

13. If you did follow a routine were you able to tell other people such as parents and friends what your routine was so that they gave you space and did not interfere?(Scale B) _____

Scale A:

hindered my performance			no effect on my performance				helped my performance	
1	2	3	4	5	6	7	8	9

Scale B:

definitely not not at all, no			to some extent a bit, somewhat				definitely yes a lot, yes	
1	2	3	4	5	6	7	8	9

14. How nervous or anxious did you feel the night before the race? (Scale B) _____
15. How do you feel this level of nervousness affected your performance? (Scale A) _____
16. The night before the race, did you think about things that don't involve swimming such as school, family or relationship problems? (Scale B) _____
17. How do you feel these non-swimming concerns affected your performance? (Scale A) _____

Day of the race

1. The day of the race, did you think of things you would like to accomplish during the race getting certain splits, having good stroke technique, great turns, etc.? (Scale B) _____
2. Did you write these things down? (Scale B) _____
3. If you did think of things you'd like to accomplish during this race, what were they?

4. What did you eat the day of this race?

5. How do you think what you ate affected your performance during the race?(Scale A) _____
6. How much water (in glasses) did you drink the day of the race? _____
7. How do you think the amount of water you drank the day of the game affected your performance during the race? (Scale A) _____
8. The day of the race, did you follow a standard routine which lasted at least 5 minutes and included things such as visualizing how to react to certain plays and deep breathing? (Scale B) _____
9. If you did follow a standard routine, what did it consist of?

10. If you did follow a mental preparation routine, how do you think this routine affected your performance? (Scale A) _____
11. If you did follow a routine were you able to tell other people such as parents and friends what your routine was so that they gave you space and did not interfere?(Scale B) _____
12. How nervous or anxious did you feel the day of the race? (Scale B) _____
13. How do you feel this level of nervousness affected your performance?(Scale A) _____
14. The day of the race, did you think about things that don't involve swimming such as school, family or relationship problems? (Scale B) _____
15. How do you feel these non-swimming concerns affected your performance?(Scale A) _____
16. Did you talk to your coach about things you need to focus on in the race?(Scale B) _____
17. While a teammate was swimming, did you show them your support? (Scale B) _____
How did you show them your support?

Scale A:

hindered my performance no effect on my performance helped my performance
1 2 3 4 5 6 7 8 9

Scale B:

definitely not to some extent definitely yes
not at all, no a bit, somewhat a lot, yes
1 2 3 4 5 6 7 8 9

18. After a teammate had a good race did you show them your support? (Scale B) _____
How did you show them your support?

During Warmup

1. Did you think about what people might say if you lost?(Scale B) _____
 2. How do you think this affected your performance? (Scale A) _____
 3. Did you think positive thoughts such as "Go for my splits", "Catch the water"? (Scale B) _____
- What are some examples of the positive self talk you used during warmup?

4. How do you think this affected your performance? (Scale A) _____
5. During warmup, did you think about things that don't involve swimming such as school, family, or relationship problems?(Scale B) _____
6. How do you think this affected your performance?(Scale A) _____
7. Did you talk to your coach about things you need to focus on in the race?(Scale B) _____

If you had a Bad Warmup (if you did not have a bad warmup, go onto the next section)

7. Overall, how do you feel it affected your performance in the race? (Scale A) _____
8. Did you find it difficult to stay energized? (Scale B) _____
9. Were you able to let it go and focus on the race? (Scale B) _____
10. Did you remain confident in your abilities as a swimmer? (Scale B) _____

Pre-start

1. How nervous or anxious did you feel the last few minutes before the race? (Scale B) _____
2. How do you feel this level of nervousness affected your performance? (Scale A) _____

If there was a false start during this race

If there was not a false start, go onto the next section.

1. How nervous or anxious did you feel? (Scale B) _____
2. Were you able to let it go and refocus on the next start?(Scale B) _____
3. Overall, how did it affect your performance in the first few strokes?(Scale A) _____
4. Did you feel so emotional that it affected your performance during the first segment?
(Scale B) _____
5. Did you find it difficult to stay energized for the first segment? (Scale B) _____

During the 1st segment

1. During the 1st segment, did you give 100% effort if:
(answer these questions only if these things happened during THIS race)

Scale A:

hindered my performance			no effect on my performance			helped my performance		
1	2	3	4	5	6	7	8	9

Scale B:

definitely not not at all, no			to some extent a bit, somewhat			definitely yes a lot, yes		
1	2	3	4	5	6	7	8	9

- (a) You got passed? (Scale B) _____
- (b) You were swimming against people you race often? (Scale B) _____
2. During the 1st segment, did you focus on anything in particular when swimming? If so, what?

3. How do you feel this affected your performance? (Scale A) _____
4. During the 1st segment, did you focus on anything in particular when doing a turn? If so, what?

5. How do you feel this affected your performance? (Scale A) _____
6. During the 1st segment, did you think about winning the race?(Scale B) _____
7. During the first segment, did you think about things such as:
- (a) I swam poorly against this person last time? (Scale B) _____
- (b) I'm feeling very sore/tired? (Scale B) _____
- (c) I hate this pool? (Scale B) _____
- (d) My turns suck? (Scale B) _____
8. During the first segment, did you think about what people might say if you lost? (Scale B) _____
9. During the first segment, did you think positive thoughts such as "I'm catching the water", "Accelerate", "Kick", etc.?(Scale B) _____
- What are some examples of the positive self talk you used during the first segment?

10. How do you think these positive thoughts affected your performance?(Scale A) _____
11. During the 1st segment, did you think about things that don't involve swimming such as school, family, or relationship problems? (Scale B) _____
12. How do you think such thoughts affected your performance? (Scale A) _____
13. During the 1st segment, how nervous or anxious did you feel? (Scale B) _____
14. How do you feel this level of nervousness affected your performance? (Scale A) _____
15. During the 1st segment, did you stay positive if you were feeling pain? (Scale B) _____
16. During the 1st segment, did you stay positive if you fell behind? (Scale B) _____
17. During the 1st half, did you make adjustments such as dealing with an opponents tactics, pulling harder when falling behind, etc. during the race? (Scale B) _____

If you got passed during the first segment

If you cannot remember getting passed during the first segment, go onto the next section.

18. Overall, how did it affect your performance in the next few strokes? (Scale A) _____
19. Did you feel so emotional that it affected your performance in the next few strokes? (Scale B) _____
20. Did you find it difficult to stay energized for the next few strokes? (Scale B) _____
21. Were you able to let it go and refocus on the next segment? (Scale B) _____
22. Did you remain confident in your abilities as a swimmer? (Scale B) _____
23. How nervous or anxious did you feel? (scale B)?" _____

Scale A:

hindered my performance				no effect on my performance				helped my performance
1	2	3	4	5	6	7	8	9

Scale B:

definitely not not at all, no				to some extent a bit, somewhat				definitely yes a lot, yes
1	2	3	4	5	6	7	8	9

If you felt fatigued/pain during the first segment

If you did not feel fatigued or pain during the first segment, go onto the next section.

24. Overall, how did it affect your performance in the next few strokes? (Scale A) _____
25. Did you feel so emotional that it affected your performance in the next few strokes?
(Scale B) _____
26. Did you find it difficult to stay energized for the next few strokes? (Scale B) _____
27. Were you able to let it go and refocus on the next segment? (Scale B) _____
28. Did you remain confident in your abilities as a swimmer? (Scale B) _____
29. How nervous or anxious did you feel? (scale B)? _____

If you heard a coach or someone else yell something which "bothered you" during the first segment

If this did not happen during the first segment, go onto the next section.

30. Overall, how did it affect your performance in the next few strokes? (Scale A) _____
31. Did you feel so emotional that it affected your performance in the next few strokes? (Scale B)

32. Did you find it difficult to stay energized for the next few strokes? (Scale B) _____
33. Were you able to let it go and refocus on the next segment? (Scale B) _____
34. Did you remain confident in your abilities as a swimmer? (Scale B) _____
35. How nervous or anxious did you feel? (scale B)? _____

During the middle segment(s)

1. During the middle segment(s), did you give 100% effort if:
(answer these questions only if these things happened during THIS race)
 - (a) You got passed? (Scale B) _____
 - (b) You were swimming against people you race often? (Scale B) _____
2. During the middle segment(s), did you focus on anything in particular when swimming? If so, what? _____
3. How do you feel this affected your performance? (Scale A) _____
4. During the middle segment(s), did you focus on anything in particular when doing a turn? If so, what? _____
5. How do you feel this affected your performance? (Scale A) _____
6. During the middle segment(s), did you think about winning the race? (Scale B) _____
7. During the middle segment(s), did you think about things such as:
 - (a) I swam poorly against this person last time? (Scale B) _____
 - (b) I'm feeling very sore/tired? (Scale B) _____
 - (c) I hate this pool? (Scale B) _____
 - (d) My turns suck? (Scale B) _____
8. During the middle segment(s), did you think about what people might say if you lost?
(Scale B) _____
9. During the middle segment(s), did you think positive thoughts such as "I'm catching the water", "Accelerate", "Kick", etc.? (Scale B) _____

Scale A:

hindered my performance			no effect on my performance					helped my performance
1	2	3	4	5	6	7	8	9

Scale B:

definitely not not at all, no			to some extent a bit, somewhat					definitely yes a lot, yes
1	2	3	4	5	6	7	8	9

What are some examples of the positive self talk you used during the middle segment(s)?

10. How do you think these positive thoughts affected your performance? (Scale A) _____
11. During the middle segment(s), did you think about things that don't involve swimming such as school, family, or relationship problems? (Scale B) _____
12. How do you think such thoughts affected your performance? (Scale A) _____
13. During the middle segment(s), how nervous or anxious did you feel? (Scale B) _____
14. How do you feel this level of nervousness affected your performance? (Scale A) _____
15. During the middle segment(s), did you stay positive if you were feeling pain? (Scale B) _____
16. During the middle segment(s), did you stay positive if you fell behind?(Scale B) _____
17. During the middle segment(s), did you make adjustments such as dealing with an opponents tactics, pulling harder when falling behind, etc. during the race? (Scale B) _____

If you got passed during the middle segment(s)

If you cannot remember getting passed during the middle segment(s), go onto the next section.

18. Overall, how did it affect your performance in the next few strokes? (Scale A) _____
19. Did you feel so emotional that it affected your performance in the next few strokes? (Scale B) _____
20. Did you find it difficult to stay energized for the next few strokes? (Scale B) _____
21. Were you able to let it go and refocus on the next segment? (Scale B) _____
22. Did you remain confident in your abilities as a swimmer? (Scale B) _____
23. How nervous or anxious did you feel? (scale B)? _____

If you felt fatigued/pain during the middle segment(s)

If you did not feel fatigued or pain during the middle segment(s), go onto the next section.

24. Overall, how did it affect your performance in the next few strokes? (Scale A) _____
25. Did you feel so emotional that it affected your performance in the next few strokes? (Scale B) _____
26. Did you find it difficult to stay energized for the next few strokes? (Scale B) _____
27. Were you able to let it go and refocus on the next segment? (Scale B) _____
28. Did you remain confident in your abilities as a swimmer? (Scale B) _____
29. How nervous or anxious did you feel? (scale B)? _____

If you heard a coach or someone else yell something which "bothered you" during the middle segment(s)

If this did not happen during the middle segment(s), go onto the next section.

30. Overall, how did it affect your performance in the next few strokes? (Scale A) _____

Scale A:

hindered my performance no effect on my performance helped my performance
1 2 3 4 5 6 7 8 9

Scale B:

definitely not to some extent definitely yes
not at all, no a bit, somewhat a lot, yes
1 2 3 4 5 6 7 8 9

31. Did you feel so emotional that it affected your performance in the next few strokes?(Scale B) _____

32. Did you find it difficult to stay energized for the next few strokes? (Scale B) _____

33. Were you able to let it go and refocus on the next segment?(Scale B) _____

34. Did you remain confident in your abilities as a swimmer?(Scale B) _____

35. How nervous or anxious did you feel?(scale B)? _____

During the last segment

1. During the last segment, did you give 100% effort if:

(answer these questions only if these things happened during THIS race)

(a) You got passed? (Scale B) _____

(b) You were swimming against people you race often? (Scale B) _____

2. During the last segment, did you focus on anything in particular when swimming? If so, what?

3. How do you feel this affected your performance? (Scale A) _____

4. During the last segment, did you focus on anything in particular when doing a turn? If so, what?

5. How do you feel this affected your performance? (Scale A) _____

6. During the last segment, did you think about winning the race? (Scale B) _____

7. During the last segment, did you think about things such as:

(a) I swam poorly against this person last time? (Scale B) _____

(b) I'm feeling very sore/tired? (Scale B) _____

(c) I hate this pool? (Scale B) _____

(d) My turns suck? (Scale B) _____

8. During the last segment, did you think about what people might say if you lost? (Scale B) _____

9. During the last segment, did you think positive thoughts such as "I'm catching the water",

"Accelerate", "Kick", etc.?(Scale B) _____

What are some examples of the positive self talk you used during the last segment?

10. How do you think these positive thoughts affected your performance?(Scale A) _____

11. During the last segment, did you think about things that don't involve swimming such as school, family, or relationship problems? (Scale B) _____

12. How do you think such thoughts affected your performance? (Scale A) _____

13. During the last segment, how nervous or anxious did you feel? (Scale B) _____

14. How do you feel this level of nervousness affected your performance? (Scale A) _____

15. During the last segment, did you stay positive if you were feeling pain?(Scale B) _____

16. During the last segment, did you stay positive if you fell behind? (Scale B) _____

17. During the last half, did you make adjustments such as dealing with an opponents tactics, pulling harder when falling behind, etc. during the race? (Scale B) _____

If you got passed during the last segment

If you cannot remember getting passed during the last segment, go onto the next section.

Scale A:

hindered my performance				no effect on my performance				helped my performance
1	2	3	4	5	6	7	8	9

Scale B:

definitely not not at all, no				to some extent a bit, somewhat				definitely yes a lot, yes
1	2	3	4	5	6	7	8	9

18. Overall, how did it affect your performance in the next few strokes? (Scale A) _____
19. Did you feel so emotional that it affected your performance in the next few strokes?
(Scale B) _____
20. Did you find it difficult to stay energized for the next few strokes? (Scale B) _____
21. Were you able to let it go and refocus on the reaching for the wall? (Scale B) _____
22. Did you remain confident in your abilities as a swimmer? (Scale B) _____
23. How nervous or anxious did you feel? (scale B)? _____

If you felt fatigued/pain during the last segment

If you did not feel fatigued or pain during the last segment, go onto the next section

24. Overall, how did it affect your performance in the next few strokes? (Scale A) _____
25. Did you feel so emotional that it affected your performance in the next few strokes?
(Scale B) _____
26. Did you find it difficult to stay energized for the next few strokes? (Scale B) _____
27. Were you able to let it go and refocus on the reaching for the wall? (Scale B) _____
28. Did you remain confident in your abilities as a swimmer? (Scale B) _____
29. How nervous or anxious did you feel? (scale B)? _____

If you heard a coach or someone else yell something which "bothered you" during the last segment

If this did not happen during the last segment, go onto the next section)

30. Overall, how did it affect your performance in the next few strokes? (Scale A) _____
31. Did you feel so emotional that it affected your performance in the next few strokes?
(Scale B) _____
32. Did you find it difficult to stay energized for the next few strokes? (Scale B) _____
33. Were you able to let it go and refocus on reaching for the wall? (Scale B) _____
34. Did you remain confident in your abilities as a swimmer? (Scale B) _____
35. How nervous or anxious did you feel? (scale B)? _____

Immediately after the race

1. Apart from completing this questionnaire, did you spend at least 5 minutes evaluating your mental preparation for this race? (Scale B) _____
2. If you had a poor performance, did you consciously let go of it so that you could focus on the next race? (Scale B) _____
3. Did you spend at least 5 minutes thinking about the good things that happened and how you could incorporate them into the next race? (Scale B) _____
4. Did you discuss the good and bad parts of the race with your coach in order to find out what to improve upon in the next game? (Scale B) _____
5. Did you try to learn from the bad things that happened in order to improve in the next race? (Scale B) _____

Scale A:

hindered my performance				no effect on my performance				helped my performance
1	2	3	4	5	6	7	8	9

Scale B:

definitely not not at all, no				to some extent a bit, somewhat				definitely yes a lot, yes
1	2	3	4	5	6	7	8	9

How would you rate your performance during this race?

Awful, one of my worst races				Average				Amazing, one of my best races
1	2	3	4	5	6	7	8	9

Scale A:

hindered their performance no effect on their performance helped their performance
1 2 3 4 5 6 7 8 9

Scale B:

definitely not not at all, no to some extent a bit, somewhat definitely yes a lot, yes
1 2 3 4 5 6 7 8 9

Name of athlete: _____

Date: _____

Stroke: _____

Name of coach: _____

Self report form to be completed by swimming coaches immediately after a race

Please answer this questionnaire immediately after the race without discussing it with anyone else, including the swimmer whom you are evaluating. Your answers will be completely confidential. Please answer the questions using the appropriate scale. At the end of each question it will tell you which scale to use (i.e., either A or B).

Some of the questions will be difficult to answer as it may be hard to determine if an athlete was nervous, using mental imagery, etc. Therefore, if you do not know the answer to a question, simply write "DK" (don't know) in the space provided or leave it blank.

Answer the questions based on the race you JUST coached. If a question does not apply to this race leave it out.

Day of the race

1. Approximately two hours before the race, did you feel this athlete thought of things they would like to accomplish during the race such as getting certain splits, having good stroke technique, great turns, etc.? (Scale B) _____
2. Do you think they wrote these things down? (Scale B) _____
3. Approximately two hours before the race, do you think this swimmer followed a standard routine which lasted at least 5 minutes and included things such as visualizing how to react to certain situations and deep breathing? (Scale B) _____
4. If they did follow a routine, how do you think this routine affected their performance? (Scale A) _____
5. If they did follow a routine do you think they were able to tell other people such as parents and friends what their routine was so that others didn't interfere with this routine? (Scale B) _____
6. Did this athlete talk to you about things they need to focus on in the race? (Scale B) _____
7. While a teammate was swimming, do you feel this athlete showed them their support? (Scale B) _____
How did they show them their support?

18. After a teammate had a good race do you think this athlete showed them their support? (Scale B) _____
How did they show them their support?

During Warmup

1. How nervous or anxious do you feel this athlete was during the warmup? (Scale B) _____
2. How do you feel this level of nervousness affected their performance? (Scale A) _____
3. During warmup, do you think this athlete was thinking about things that don't involve swimming such as school, family, or relationship problems? (Scale B) _____

Scale A:

hindered their performance			no effect on their performance			helped their performance		
1	2	3	4	5	6	7	8	9

Scale B:

definitely not not at all, no			to some extent a bit, somewhat			definitely yes a lot, yes		
1	2	3	4	5	6	7	8	9

4. How do you think this affected their performance? (Scale A) _____

If this athlete had a Bad Warmup

(If this athlete did not have a bad warmup, go onto the next section)

5. Overall, how do you feel it affected their performance in the race? (Scale A) _____

6. Do you think they found it difficult to stay energized? (Scale B) _____

7. Do you think they were able to let it go and focus on the race? (Scale B) _____

8. Do you think they remained confident in their abilities as a swimmer?(Scale B) _____

Pre-start

1. How nervous or anxious did you feel this athlete was during the last few minutes before the race?
(Scale B) _____

2. How do you feel this level of nervousness affected their performance?(Scale A) _____

If there was a false start during this race

If there was not a false start, go onto the next section.

1. How nervous or anxious did you feel this athlete was? (Scale B) _____

2. Do you feel this swimmer was able to let it go and refocus on the next start? (Scale B) _____

3. Overall, how do you feel this affected their performance in the first few strokes?

(Scale A) _____

4. Do you think this athlete was so emotional that it affected their performance during the first segment? (Scale B) _____

5. Do you think they found it difficult to stay energized for the first segment? (Scale B) _____

During the first segment

1. During the 1st segment, do you feel this athlete gave 100% effort if:

(answer these questions only if these things happened during THIS race)

(a) They got passed? (Scale B) _____

(b) They were swimming against people they race often? (Scale B) _____

2. During the 1st segment, do you feel this athlete thought about things that don't involve swimming such as school, family, or relationship problems? (Scale B) _____

3. How do you think such thoughts affected their performance? (Scale A) _____

4. During the 1st segment, how nervous or anxious did you feel this athlete was?

(Scale B) _____

5. How do you feel this level of nervousness affected their performance?(Scale A) _____

6. During the 1st segment, do you feel this swimmer remained positive if they were feeling pain?

(Scale B) _____

7. During the 1st segment, do you feel this swimmer remained positive if they fell behind?

(Scale B) _____

8. During the 1st half, do you feel this swimmer made adjustments such as dealing with an opponents tactics, pulling harder when falling behind, etc. during the race? (Scale B) _____

Scale A:

hindered
their performance
1 2 3 4 5 6 7 8 9

no effect
on their performance

helped
their performance

Scale B:

definitely not
not at all, no
1 2 3 4 5 6 7 8 9

to some extent
a bit, somewhat

definitely yes
a lot, yes

If this swimmer was passed during the first segment

If you cannot remember this swimmer being passed during the first segment, go onto the next section.

9. Overall, how do you feel this affected their performance in the next few strokes? (Scale A)

10. Did you feel that this swimmer was so emotional that it affected their performance in the next few strokes? (Scale B) _____
11. Do you feel this swimmer found it difficult to stay energized for the next few strokes?
(Scale B) _____
12. Do you feel this swimmer was able to let it go and refocus on the next segment?
(Scale B) _____
13. Do you feel this swimmer remained confident in their abilities as a swimmer?
(Scale B) _____
14. How nervous or anxious did you feel this swimmer was? (scale B)? _____

If you feel this swimmer felt fatigue/pain during the first segment

If you do not feel that this swimmer felt fatigue or pain during the first segment, go onto the next section.

15. Overall, how do you feel this affected their performance in the next few strokes? (Scale A)

16. Did you feel that this swimmer was so emotional that it affected their performance in the next few strokes? (Scale B) _____
17. Do you feel this swimmer found it difficult to stay energized for the next few strokes?
(Scale B) _____
18. Do you feel this swimmer was able to let it go and refocus on the next segment?
(Scale B) _____
19. Do you feel this swimmer remained confident in their abilities as a swimmer?
(Scale B) _____
20. How nervous or anxious did you feel this swimmer was? (scale B)? _____

If you heard a coach or someone else yell something which may have "bothered" this swimmer during the first segment

If this did not happen during the first segment, go onto the next section.

21. Overall, how do you feel this affected their performance in the next few strokes? (Scale A)

22. Did you feel that this swimmer was so emotional that it affected their performance in the next few strokes? (Scale B) _____
23. Do you feel this swimmer found it difficult to stay energized for the next few strokes?
(Scale B) _____
24. Do you feel this swimmer was able to let it go and refocus on the next segment?

Scale A:								
hindered			no effect					helped
their performance			on their performance					their performance
1	2	3	4	5	6	7	8	9

Scale B:								
definitely not			to some extent					definitely yes
not at all, no			a bit, somewhat					a lot, yes
1	2	3	4	5	6	7	8	9

(Scale B) _____

25. Do you feel this swimmer remained confident in their abilities as a swimmer?

(Scale B) _____

26. How nervous or anxious did you feel this swimmer was? (scale B)? _____

During the middle segment(s)

1. During the middle segments, do you feel this athlete gave 100% effort if:

(answer these questions only if these things happened during THIS race)

(a) They got passed? (Scale B) _____

(b) They were swimming against people they race often? (Scale B) _____

2. During the middle segments, do you feel this athlete thought about things that don't involve swimming such as school, family, or relationship problems? (Scale B) _____

3. How do you think such thoughts affected their performance? (Scale A) _____

4. During the middle segments, how nervous or anxious did you feel this athlete was?

(Scale B) _____

5. How do you feel this level of nervousness affected their performance? (Scale A) _____

6. During the middle segments, do you feel this swimmer remained positive if they were feeling pain?

(Scale B) _____

7. During the middle segments, do you feel this swimmer remained positive if they fell behind?

(Scale B) _____

8. During the middle segments, do you feel this swimmer made adjustments such as dealing with an opponents tactics, pulling harder when falling behind, etc. during the race? (Scale B) _____

If this swimmer was passed during the middle segment(s)

If you cannot remember this swimmer being passed during the middle segments, go onto the next section.

9. Overall, how do you feel this affected their performance in the next few strokes? (Scale A)

10. Did you feel that this swimmer was so emotional that it affected their performance in the next few strokes? (Scale B) _____

11. Do you feel this swimmer found it difficult to stay energized for the next few strokes?

(Scale B) _____

12. Do you feel this swimmer was able to let it go and refocus on the next segment?

(Scale B) _____

13. Do you feel this swimmer remained confident in their abilities as a swimmer?

(Scale B) _____

14. How nervous or anxious did you feel this swimmer was? (scale B)? _____

If you feel this swimmer felt fatigue/pain during the middle segment(s)

If you do not feel that this swimmer felt fatigue or pain during the middle segments, go onto the next section.

15. Overall, how do you feel this affected their performance in the next few strokes? (Scale A)

Scale A:

hindered their performance			no effect on their performance					helped their performance
1	2	3	4	5	6	7	8	9

Scale B:

definitely not not at all, no			to some extent a bit, somewhat					definitely yes a lot, yes
1	2	3	4	5	6	7	8	9

16. Did you feel that this swimmer was so emotional that it affected their performance in the next few strokes? (Scale B) _____
17. Do you feel this swimmer found it difficult to stay energized for the next few strokes? (Scale B) _____
18. Do you feel this swimmer was able to let it go and refocus on the next segment? (Scale B) _____
19. Do you feel this swimmer remained confident in their abilities as a swimmer? (Scale B) _____
20. How nervous or anxious did you feel this swimmer was? (scale B)? _____

If you heard a coach or someone else yell something which may have "bothered" this swimmer during the middle segment(s)

If this did not happen during the middle segments, go onto the next section.

21. Overall, how do you feel this affected their performance in the next few strokes? (Scale A) _____
22. Did you feel that this swimmer was so emotional that it affected their performance in the next few strokes? (C14) (Scale B) _____
23. Do you feel this swimmer found it difficult to stay energized for the next few strokes? (Scale B) _____
24. Do you feel this swimmer was able to let it go and refocus on the next segment? (Scale B) _____
25. Do you feel this swimmer remained confident in their abilities as a swimmer? (Scale B) _____
26. How nervous or anxious did you feel this swimmer was? (scale B)? _____

During the last segment

1. During the last segment, do you feel this athlete gave 100% effort if:
(answer these questions only if these things happened during THIS race)
- (a) They got passed? (Scale B) _____
- (b) They were swimming against people they race often? (Scale B) _____
2. During the last segment, do you feel this athlete thought about things that don't involve swimming such as school, family, or relationship problems? (Scale B) _____
3. How do you think such thoughts affected their performance? (Scale A) _____
4. During the last segment, how nervous or anxious did you feel this athlete was? (Scale B) _____
5. How do you feel this level of nervousness affected their performance? (Scale A) _____
6. During the last segment, do you feel this swimmer remained positive if they were feeling pain? (Scale B) _____
7. During the last segment, do you feel this swimmer remained positive if they fell behind? (Scale B) _____

<u>Scale A:</u>								
hindered their performance			no effect on their performance				helped their performance	
1	2	3	4	5	6	7	8	9
<u>Scale B:</u>								
definitely not not at all, no			to some extent a bit, somewhat				definitely yes a lot, yes	
1	2	3	4	5	6	7	8	9

8. During the last half, do you feel this swimmer made adjustments such as dealing with an opponents tactics, pulling harder when falling behind, etc. during the race? (Scale B) _____

If this swimmer was passed during the last segment

If you cannot remember this swimmer being passed during the last segment, go onto the next section.

9. Overall, how do you feel this affected their performance in the next few strokes?
(Scale A) _____
10. Did you feel that this swimmer was so emotional that it affected their performance in the next few strokes? (Scale B) _____
11. Do you feel this swimmer found it difficult to stay energized for the next few strokes?
(Scale B) _____
12. Do you feel this swimmer was able to let it go and refocus on the rest of the race?
(Scale B) _____
13. Do you feel this swimmer remained confident in their abilities as a swimmer?
(Scale B) _____
14. How nervous or anxious did you feel this swimmer was? (scale B)? _____

If you feel this swimmer felt fatigue/pain during the last segment

If you do not feel that this swimmer felt fatigue or pain during the last segment, go onto the next section.

15. Overall, how do you feel this affected their performance in the next few strokes? (Scale A)

16. Did you feel that this swimmer was so emotional that it affected their performance in the next few strokes? (Scale B) _____
17. Do you feel this swimmer found it difficult to stay energized for the next few strokes?
(Scale B) _____
18. Do you feel this swimmer was able to let it go and refocus on the rest of the race?
(Scale B) _____
19. Do you feel this swimmer remained confident in their abilities as a swimmer?
(Scale B) _____
20. How nervous or anxious did you feel this swimmer was? (scale B)? _____

If you heard a coach or someone else yell something which may have "bothered" this swimmer during the last segment

If this did not happen during the last segment, go onto the next section.

21. Overall, how do you feel this affected their performance in the next few strokes?
(Scale A) _____
22. Did you feel that this swimmer was so emotional that it affected their performance in the next few strokes? (Scale B) _____
23. Do you feel this swimmer found it difficult to stay energized for the next few strokes?

Scale A:

hindered their performance no effect on their performance helped their performance
1 2 3 4 5 6 7 8 9

Scale B:

definitely not not at all, no to some extent a bit, somewhat definitely yes a lot, yes
1 2 3 4 5 6 7 8 9

(Scale B) _____

24. Do you feel this swimmer was able to let it go and refocus on the rest of the race?

(Scale B) _____

25. Do you feel this swimmer remained confident in their abilities as a swimmer?

(Scale B) _____

26. How nervous or anxious did you feel this swimmer was? (scale B)? _____

Immediately after the race

1. Apart from completing this questionnaire, do you think this player spent at least 5 minutes evaluating their mental preparation for this race? (Scale B) _____

2. Did this player discuss the good and bad parts of this race with you in order to find out what to improve upon in the next race? (Scale B) _____

How would you rate this athlete's performance during this race?

Awful, one of their worst races Average Amazing, one of their best races
0 1 2 3 4 5 6 7 8 9 10

Appendix R

The items on the questionnaire used to measure predictive validity which were correlated with the practice section of the sport specific questionnaire

The items on the questionnaire which will be used to measure predictive validity which will be correlated with each item on the sport specific questionnaire for basketball players at practice

Item on Sport Specific Questionnaire	Items on Concurrent Validity Questionnaire which will make up the composite score
1	Before Practice #1
2	Before Practice #2
3	Before Practice #5
4	First Half #2, Second #2, #20
5	First Half #8, #9, Second Half #8, #9
6	First Half #14, Second half #14
7	First half #16, Second half #16
8	First half #17, #18, #19, Second half #17, #18, #19
9	First half #10, Second half #10
10	First half #1, #14, Second half #1, #14
11	First half #3, #5, #11, #13, #15 Second half #3, #5, #11, #13, #15
12	First half #7, Second half #7
13	First half #5, Second half #5
14	First half #3, #11, #15, Second half #3, #11, #15
15	Warmup #2, First half #4, #6, Second half #4, #6
16	First half #12, Second half #12
17	First half #13, Second half #13

The items on the questionnaire which will be used to measure predictive validity which will be correlated with each item on the sport specific questionnaire for swimmers at practice

Item on Sport Specific Questionnaire	Items on Concurrent Validity Questionnaire which will make up the composite score
1	Before Practice #1
2	Before Practice #2
3	Before Practice #5
4	First half #2, Second half #2, #20
5	First half #8, #9, Second half #8, #9
6	First half #14, Second half #14
7	First half #16, Second half #16
8	Second half # 17, #18, #19
9	First half #10, Second half #10
10	First half #1, #14, Second half #1, #14
11	First half #3, #5, #11, #13, #15 Second half #3, #5, #11, #13, #15
12	First half #7, Second half #7,
13	First half #5, Second half #5
14	First half #3, #11, #15, Second half #3, #11, #15
15	Warming up #2, First half #4, #6, Second half #4, #6
16	First half #12, Second half #12
17	First half #, 13, Second half #13

The items on the questionnaire which will be used to measure predictive validity which will be correlated with each item on the sport specific questionnaire for basketball coaches at practice

Item on Sport Specific Questionnaire	Items on Concurrent Validity Questionnaire which will make up the composite score
1	
2	
3	Before Practice # 2
4	First half #2, Second half #2, #9
5	First half #5, Second half #5
6	Before Practice #1, First half # 8, Second half # 8
7	
8	
9	First half #6, Second half #6
10	First half #1, Second half #1
11	
12	
13	
14	
15	Warmup #1, First half #3, #4, Second half #3, #4
16	First half #7, Second half #7
17	

The items on the questionnaire which will be used to measure predictive validity which will be correlated with each item on the sport specific questionnaire for swimming coaches at practice

Item on Sport Specific Questionnaire	Items on Concurrent Validity Questionnaire which will make up the composite score
1	
2	
3	Before Practice # 2
4	First half #2, Second half #2, #9
5	First half #5, Second half #5
6	Before Practice #1, First half # 8, Second half # 8
7	
8	
9	First half #6, Second half #6
10	First half #1, Second half #1
11	
12	
13	
14	
15	Warmup #1, First half #3, #4, Second half #3, #4
16	First half #7, Second half #7
17	

Appendix S

The items on the questionnaire used to measure predictive validity which were correlated with the competition section of the sport specific questionnaire

The items on the questionnaire which will be used to measure predictive validity which will be correlated with each item on the sport specific questionnaire for basketball players at competition

Item on Sport Specific Questionnaire	Items on Concurrent Validity Questionnaire which will make up the composite score
1	Warmup #3, #4, First half #9, #10, Second half #9, #10, Half time # 3, #4
2	First half #7a-d, Second half #7a-d
3	2 hours before #1, #2
4	Warmup #10, First half, #28, #33, #38 Second half #28, #33, #38, #40, Half time #10
5	First half #3, #5, #6, Second half #3, #5, #6
6	First half #7a-d, Second half #7a-d
7	Warmup #1, #2, First half #8, Second half #8, #39 Half time #1, #2
8	Night before #16, #17, Day of #14, #15 Warmup #5, #6, First half #11, #12, Second half #11, #12, Half time #5, #6
9	Warmup #9, First half #27, #32, #37 Second half #27, #32, #37, Half time #9
10	Bad Warmup #8, First half, #26, #31, #36 Second half #26, #31, #36, Half time #8
11	First half #21, #22, #23, Second half #21, #22, #23
12	First half #18, Second half #18
13	First half #15, #16, #17, Second half #15, #16, #17
14	First half #25, #30, #35, Second half #25, #30, #35 Half time # 11
15	First half #1, Second half #1
16	Night before #1, Day of #1
17	Night before #5, #7, #9, Day of #5, #7
18	Night before #10, #12, Day of #8, #10
19	Night before #13, Day of #11
20	First half #19, #20, Second half #19, #20

The items on the questionnaire which will be used to measure predictive validity which will be correlated with each item on the sport specific questionnaire for swimmers at competition

Item on Sport Specific Questionnaire	Items on Concurrent Validity Questionnaire which will make up the composite score
1	Warmup #3, #4, First, middle, end segments #9, 10
2	First, middle, end segments #7a-d
3	Pre-start #1, #2, False start, #1, First, middle, end segments #13, 14, 23, 29, 35
4	Bad Warmup #10, First, middle, end segments #22, 28, 34
5	First, middle, end segments #3, 5, 6
6	First, middle, end segments #7a-d
7	Warmup #1, #2, First, middle, end segments #8
8	Night before #16, #17, Day of #14, #15 Warmup #5, #6, First, middle, end segments #11, 12
9	Bad Warmup #9, False start, #2, #3, First, middle, end segments # 18, 21, 24, 27, 30, 33
10	Bad Warmup #8, False start #5, First, middle, end segments #20, 26, 32
11	Day of #16, Warmup #7
12	First, middle, end segments #17
13	First, middle, end segments #15, 16
14	False start #4 First, middle, end segments #19, 25, 31
15	First, middle, end segments #1a, 1b
16	Night before #1, Day of #1
17	Night before #5, #7, #9, Day of #5, #7
18	Night before #10, #12, Day of #8, #10
19	Night before #13, Day of #11
20	Day of #17, #18

The items on the questionnaire which will be used to measure predictive validity which will be correlated with each item on the sport specific questionnaire for basketball coaches at competition

Item on Sport Specific Questionnaire	Items on Concurrent Validity Questionnaire which will make up the composite score
1	
2	
3	First half #4, #5, Second half #4, #5, #35
4	Warmup #8, First half #20, #26, #32 Second half #20, #26, #32, #37, #34, Half time #6
5	
6	
7	Second half #33
8	Warmup #3, #4 First half #2, #3, Second half #2, #3
9	Warmup #7, First half #19, #25, #31 Second half #19, #25, #31, Half time #5
10	First half #18, #24, #30 Second half, #18, #24, #30, Half time #4
11	First half #12, #13, #14, Second half #12, #13, #14
12	First half #9, Second half #9
13	First half #6, #7, #8, Second half #6, #7, #8
14	First half #16, #17, #22, #23, #28, #29 Second half #16, #17, #22, #23, #28, #29, Half time #2, #3
15	First half #1, Second half #1
16	2 hours before #1
17	
18	2 hours before #3, #4
19	2 hours before #5
20	First half #10, #11, Second half #10, #11

The items on the questionnaire which will be used to measure predictive validity which will be correlated with each item on the sport specific questionnaire for swimming coaches at competition

Item on Sport Specific Questionnaire	Items on Concurrent Validity Questionnaire which will make up the composite score
1	
2	
3b	Warmup, #1, 2, Pre-start #1, #2, False start, #1, First, middle, end segments #14, 20, 26
4	Bad Warmup #8, First, middle, end segments #13, 19, 25
5	
6	
7	
8	Warmup #3, 4, First, middle, end segments #2, 3
9	Bad Warmup 7, False start, #2, #3, First, middle, end segments # 9, 12, 15, 18, 21, 24
10	Bad Warmup #6, False start #5, First, middle, end segments #11, 17, 23
11	Day of #6
12	First, middle, end segments #8
13	First, middle, end segments #6, 7
14	False start #4, First, middle, end segments #10, 16, 22
15	First, middle, end segments #1a, 1b
16	Day of #1
17	
18	Day of #3, 4
19	Day of #5
20	Day of #7, 8

Appendix T

Mean (and standard deviation) of predictive validity items for
basketball and swimming

**Mean (and standard deviation) of predictive validity items for
basketball players**

Item	Competition	Immediately After	Practice
1	6.13 (1.54)	3.73 (1.68)	5.03 (1.91)
2	8.31 (0.69)	6.30 (2.60)	
3	5.00 (0.99)	4.3 (2.35)	7.17 (1.19)
4	7.78 (1.02)	3.8 (2.38)	6.27 (0.83)
5	5.37 (1.77)	7.03 (1.28)	5.76 (0.99)
6	8.31 (0.69)		4.0 (1.26)
7	6.84 (1.34)		5.04 (1.85)
8	5.85 (0.51)		
9	7.03 (1.00)		6.95 (0.88)
10	7.72 (1.21)		4.89 (0.94)
11	7.20 (1.30)		4.77 (1.59)
12	6.42 (1.93)		5.55 (1.70)
13	6.51 (1.28)		4.88 (1.82)
14	7.10 (0.99)		4.84 (1.65)
15	8.50 (0.71)		6.35 (1.06)
16	5.73 (0.97)		6.13 (1.38)
17	5.59 (0.83)		4.27 (2.26)
18	3.54 (2.28)		
19	2.93 (1.53)		
20	8.03 (1.06)		
AVERAGE All items = 5.54 (0.80)	6.44 (0.65)	5.01 (1.36)	5.18 (0.81)

Mean (and standard deviation) of predictive validity items for swimmers

Item	Competition	Immediately After	Practice
1	6.68 (0.82)	3.72 (2.31)	6.22 (1.99)
2	8.53 (0.48)	7.75 (0.96)	1.47 (1.00)
3	6.08 (0.81)	6.82 (1.95)	7.08 (1.11)
4	7.93 (1.29)	8.22 (1.44)	7.49 (0.42)
5	6.57 (0.44)	6.94 (1.44)	6.69 (1.19)
6	8.53 (0.48)		6.63 (1.95)
7	3.50 (0.38)		6.42 (1.07)
8	6.32 (0.72)		
9	6.51 (0.73)		7.61 (0.82)
10	7.18 (1.77)		7.40 (0.77)
11	7.31 (1.82)		6.52 (0.50)
12	3.72 (2.13)		6.08 (1.89)
13	7.58 (1.15)		6.39 (0.57)
14	8.02 (1.07)		6.51 (0.72)
15	8.11 (1.09)		7.04 (0.68)
16	6.42 (1.33)		6.25 (1.78)
17	5.86 (0.61)		6.75 (2.14)
18	5.43 (1.36)		
19	3.82 (2.80)		
20	8.03 (1.19)		
AVERAGE All items = 6.57 (0.61)	6.61 (0.37)	6.70 (1.04)	6.41 (0.55)

**Mean (and standard deviation) of predictive validity items for
basketball coaches**

Item	Competition	Immediately After	Practice
1		6.8 (1.30)	
2			
3	4.34 (0.62)		7.22 (1.49)
4	5.57 (0.76)	2.5 (1.66)	6.93 (1.27)
5			6.69 (1.36)
6			6.55 (1.55)
7	7.53 (1.42)		
8	6.10 (0.94)		
9	5.19 (1.60)		7.50 (1.21)
10	6.04 (1.89)		6.83 (1.25)
11	6.24 (0.87)		
12	4.86 (1.65)		
13	5.23 (1.21)		
14	4.35 (0.78)		
15	5.06 (3.03)		6.79 (1.17)
16	7.00 (1.36)		6.97 (1.0)
17			
18	5.67 (2.09)		
19	4.33 (1.15)		
20	7.18 (2.35)		

Mean (and standard deviation) of predictive validity items for swimming coaches

Item	Competition	Immediately After	Practice
1		5.67 (2.05)	
2			
3	6.09 (0.55)		6.83 (1.53)
4	7.06 (1.46)	8.28 (0.90)	7.15 (1.15)
5			7.53 (1.42)
6			6.06 (1.95)
7			
8	7.15 (1.41)		
9	5.13 (0.92)		7.61 (1.53)
10	6.15 (1.61)		7.50 (1.19)
11	7.83 (1.35)		
12	6.39 (1.81)		
13	6.94 (1.45)		
14	7.75 (1.28)		
15	7.81 (1.19)		6.40 (0.57)
16	7.44 (1.56)		3.92 (1.89)
17			
18	5.28 (1.81)		
19	3.08 (2.09)		
20	7.78 (2.09)		

Appendix U

Predictive validity of the sport specific questionnaire for athletes
(i.e., basketball players and swimmers)

Predictive Validity of Athletes

Item	Competition	Immediately After	Practice
1	0.211	0.151	-0.002
2	-0.005	0.249	0.334
3	-0.372	-0.005	-0.476
4	-0.314	-0.450	-0.056
5	-0.293	-0.215	0.281
6	0.148		0.062
7	-0.399		-0.155
8	0.049		
9	-0.296		0.143
10	-0.174		-0.288
11	-0.285		0.005
12	0.459		0.002
13	-0.043		-0.295
14	-0.161		0.078
15	-0.472		-0.133
16	-0.006		-0.157
17	-0.252		-0.038
18	0.429		
19	0.408		
20	-0.646**		
AVERAGE (All items = 044)	-0.075	0.091	-0.162

** = correlation is significant at the 0.01 level (2-tailed)

Predictive Validity for Various Constructs

Goalsetting for game	-.006
Selftalk for game	.132
Focus for game	-.296
Concentration for game	-.293
Managing distractor for game	-.288
Reacting to game & making changes	.061
Emotional management for game	-.161
Arousal Management for game	-.202
Confidence for game	-.314
Communication for game	-.156
Precompetition plan for game	.312
Focus for immediately after	.249
Communication for immediately after	-.450
Precompetition for immediately after	-.005
Post comp. evaluation for immediately after	.211
Imagery for practice	.078
Goalsetting for practice	-.002
Selftalk for practice	-.295
Focus for practice	-.181
Managing distractor for practice	.002
Concentration for practice	-.056
Emotional management for practice	-.471
Quality Practice	.104
Simulations	-.024
Practice Mental Skills	.005
Goalsetting for practice & game	.136
Selftalk for practice & game	.133
Focus for practice & game	-.223
Concentration for practice & game	-.142
Managing distractor for practice & game	-.086
Emotional management for practice & game	-.283
Communication for practice & game	-.347
Precompetition plan for practice & game	.107

* = correlation is significant at the 0.05 level (1-tailed)

** = correlation is significant at the 0.01 level (1-tailed)

Appendix V

**Predictive validity of the sport specific questionnaire for coaches
(i.e., basketball and swimming coaches)**

Predictive Validity for Coaches

<u>Item</u>	<u>Competition</u>	<u>Immediately After</u>	<u>Practice</u>
1		-0.131	
2			
3	0.154		-0.546
4	-0.143	-0.123	-0.460
5			-0.616*
6			-0.59
7	0.325		
8	0.036		
9	0.160		-0.151
10	-0.430		-0.199
11	-0.17		
12	-0.36		
13	-0.222		
14	-0.146		
15	-0.811**		0.432
16	-0.155		0.406
17			
18	0.461		
19	-0.466		
20	-0.131		
AVERAGE			

* = correlation is significant at the 0.05 level (1-tailed)

** = correlation is significant at the 0.01 level (1-tailed)

Appendix W

Convergent validity of items on the questionnaire which were used to measure
predictive validity

Convergent Validity of Predictive Validity Questionnaire

<u>Item</u>	<u>Competition</u>	<u>Immediately After</u>	<u>Practice</u>
1		0.618*	
2			
3	0.526*		0.471
4	0.318	0.729**	0.311
5			0.287
6			-0.290
7	-0.166		
8	0.192		
9	0.180		-0.049
10	0.647*		0.146
11	0.336		
12	-0.695**		
13	0.647*		
14	0.525*		
15	0.330		-0.022
16	0.219		-0.021
17			
18	0.713*		
19	-0.044		
20	-0.175		
AVERAGE			

* = correlation is significant at the 0.05 level (1-tailed)

** = correlation is significant at the 0.01 level (1-tailed)