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Therapeutic Assessment in Sport Psychology

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Therapeutic Assessment in Sport Psychology

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Abstract

This paper outlines the history of assessment in sport psychology and provides a summary of controversies and criticisms of psychological testing in athletics that have persisted throughout the development of the field. Such concerns include the use of personality inventories and tests for talent identification, the misuse of tests and related ethical concerns, cultural sensitivity of tests, and debates about the validity and reliability of assessment measures. In spite of these concerns, interest and demand for psychological assessment in sport remains. Therapeutic Assessment, an emerging but not yet well-known model of collaborative psychological assessment, addresses many of these criticisms and limitations and offers the potential to enhance athletic performance as well as promote general psychological well-being of athletes. With increasing calls in the sport psychology literature for interdisciplinary thinking, alternative methodologies, and evidence-based interventions in mind, Therapeutic Assessment is a model that could shift assessment and service delivery in sport psychology.

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Introduction

The use of psychological tests in sport psychology dates as far back as the birth of the field itself. Throughout this history, the practice of assessment has been a controversial and divisive issue amongst sport psychology practitioners, particularly around the use of personality inventories and tests for talent identification, the misuse of tests and related ethical concerns, and debates about the validity and reliability of assessment measures (Anshel & Lidor, 2012; Marchant, 2010; Morgan, 1980).

Despite these controversies, interest in psychological assessment has remained. Since the early 1990s, there have been important advances in psychological assessment in sport that have improved the utility of testing in enhancing athletic performance (Thomas, 2012). Sport psychology practitioners have increasingly embraced greater diversity in training models and treatment approaches, thereby increasing the repertoire of assessment tools available to clinicians (Gibbs, 2010). Furthermore, many prominent sport psychology practitioners have championed holistic and collaborative service delivery models that address performance specific issues while also considering the overall psychological well-being of athletes across life domains (Balague, 2012; Henschen, 2012; Taylor, 2012; Thomas, 2012).

Although advances have been made, controversies about the role of assessment in sport psychology persist. This paper will provide an overview of these issues beginning with a history of sport psychology that highlights persistent themes and relevant present day issues. Finally, Therapeutic Assessment, an emerging but not yet well-known model of collaborative psychological assessment will be introduced as a model that addresses many of these deficits while also serving to enhance athletic performance and promote general psychological well-being of athletes.

History of Sport Psychology Assessment in North America

The roots of sport psychology in North America date as far back as the late 19th century (Gould & Pick, 1995). Throughout the evolution of the field, questions surrounding what should be measured as well as how, where, when, and why psychological phenomena should be measured have remained dominant issues in sport psychology (Vealey & Garner-Holman, 1998). Weinberg and Gould (2003) distinguished six historical periods that reflect the growth of sport psychology in North America. While each historical period has distinct characteristics regarding measurement issues, they have all influenced the emergence of psychological assessment as an applied sport psychology intervention tool.

Weinberg and Gould (2003) identified the time period of 1895 to 1920 as "The Early Years" of sport psychology. During this time period, the first published studies examining applied psychology in sport appeared. Early studies in the area of human performance targeted perceptual-motor skills (Fuchs, 1998). In 1898, Norman Triplett published a study considered by most to be the first in sport psychology (Fuchs, 1998; Weinberg & Gould, 2003). Triplett studied why some cyclists rode faster when they raced in groups or in front of audiences. E.W. Scripture also published studies in the area of human sport performance during this period (Fuchs, 1998). His published work included studies of runner's reaction times to starter signals, reaction time in fencing, and steadiness in aiming a rifle. Despite the planting of these early seeds, no individual during this period dedicated a significant portion of their career to applied sport psychology or related measurement issues (Gould & Pick, 1995).

The time period from 1921 to 1938 is highlighted by the contributions of Coleman Griffith (Weinberg & Gould, 2003), who is generally recognized as the "father of sport psychology" in the United States (Fuchs, 1998; Gould & Pick, 1995; Green, 2003; Williams &

Straub, 2010). Prior to Griffith's work, sport psychology was considered by many to be a hobby rather than a true academic field (Gould & Pick, 1995). This began to change in 1920 when Griffith graduated with his doctorate in psychology from the University of Illinois (Gould & Pick, 1995; Green, 2003). Soon after graduating, Griffith began teaching introductory psychology courses at the university, integrating his early sport psychology research into the course curriculum (Green, 2003). A major development in the field occurred in 1925, when the university assigned Griffith to direct the Research in Athletics Laboratory, the first laboratory dedicated to sport psychology in the United States (Gould & Pick, 1995). Griffith authored 25 articles related to sport psychology during this period, many of which were published in prestigious psychology journals (Kroll & Lewis, 1970). He also designed surveys and questionnaires to measure psychological attributes in athletes and coaches (Razon & Tenenbaum, 2014). However, the laboratory was eventually closed due to budget constraints brought on by the Great Depression (Green, 2003).

Griffith was not the only researcher to apply psychological assessment measures in athletic settings during this period. In 1921, Albert Johanson and Joseph Holmes tested legendary baseball player Babe Ruth at the Columbia University Laboratory of Psychology to examine possible psychological influences on his home run hitting prowess (Fuchs, 1998). Ruth was found to have hand-eye coordination, reaction times, and apperceptive abilities superior to the general population.

The years from 1939 to 1965 marked a relatively slow growth period in the field of sport psychology (Weinberg & Gould, 2003). According to Williams and Straub (2010), the innovative efforts of Coleman Griffith to advance the field were not followed in any systematic manner, stunting the growth of sport psychology in the two decades that followed.

The mid-1960s through the late 1970s marked the establishment of academic sport psychology, when the field became a component within the academic discipline of kinesiology (Weinberg & Gould, 2003). Within kinesiology departments, motor learning specialists and sport psychologists studied the confluence of motor skill development and psychological factors such as anxiety and personality.

In the 1960s, two clinical psychologists at San Jose State University generated increased interest in sport psychology. Bruce Ogilvie and Tom Tutko published the book *Problem Athletes and How to Handle Them* in 1966, a result of their research in the field (Williams & Straub, 2010). Ogilvie and Tutko also created the controversial Athletic Motivation Inventory, which claimed to predict success and problems in elite athletes. Sport psychologists of the day roundly criticized the claim that personality traits could predict athletic performance and rejected the inventory (Williams & Straub, 2010). Sport psychologists came to recognize that personality measures offered inadequate data to predict sport performance (Razon & Tenenbaum, 2014). Extensive research on differences in personality traits between highly successful athletes and less successful athletes revealed limited relationships between personality and performance (Thomas, 2012). Furthermore, personality measures used during that time period tended to ignore the complexity of situational and contextual factors that influence behavior. In 1976, the National Football League Players Association voted against the psychological testing of its members, a decision fueled by concern about the misuse of psychological tests and test results (Heil & Henschen, 1996).

The time period between 1978 and 2000 marked the emergence of a multidisciplinary approach to sport psychology, incorporating both science and practice (Weinberg & Gould, 2003). The dominant theme of this time period was the research of cognitive psychology

theories and their applicability in sport and performance settings (Williams & Straub, 2010). The emphasis on cognitive psychology prompted a shift in the dominant assessment measures in sport psychology from traits and motives to cognitions and self-perceptions (Vealey & Garner-Holman, 1998). The 1980s were also marked by a rise in the use of psychophysiological measures to better understand and predict human behavior in sport settings (Hatfield & Landers, 1983).

Rather than focusing on testing to determine an athletic personality ideal, Morgan, Brown, Raglin, O'Connor, and Ellickson (1987) examined the relationship of mood and performance of athletes using the Profile of Mood States (McNair, Lorr, & Droppleman, 1971). Morgan et al. found that the best performers reported higher than average drive and below average anxiety, irritation, tiredness, and uncertainty.

Throughout the 1980s and into the 1990s, a number of sport-specific tools, including the Competitive State Anxiety Inventory-II (Martens, Vealey, & Burton, 1990) and the Psychological Skills Inventory for Sports (Mahoney, Gabriel, & Perkins, 1987), were developed. By 1990, at least 175 tests designed for use in sport and exercise psychology had been developed (Ostrow, 1990). The measurement tools were well received by applied sport psychologists for their face validity and unique fit to athletic settings. However, as improved rigor was brought to these sport-specific instruments, the psychometric integrity of some tests was called into question (Dewey, Brawley, & Allard, 1989). A review conducted by Tenenbaum and Bar-Eli (1995) concluded that sport psychology lagged behind other disciplines in the area psychometric sophistication and did not use the most up-to-date protocols.

As the field of sport psychology continues to evolve into the 21st century, interest in assessment tools has grown despite ongoing controversies regarding utility of tests, reliability

and validity issues, ethical concerns, and cultural considerations. Advances over the past 20 years have led to renewed interest in the use of assessment for talent identification and development (Thomas, 2012). Interest in the relationship between performance and personality traits such as narcissism (Woodman, Zourbanos, Hardy, Beattie, & McQuillan, 2010; Woodman, Roberts, Hardy, Callow, & Rogers, 2011), perfectionism (Cumming & Duda, 2012; Stoeber, 2011), and resilience (Fletcher & Sarkar, 2012) has again emerged. Furthermore, psychological assessment has remained an integral part of the player selection process for many teams in professional sports (Gardner & Moore, 2006).

Several sport specific assessment tools developed over the past two decades have been supported by research and thus have gained increasing credibility in the field. The Test of Performance Strategies (TOPS) developed by Thomas, Murphy, and Hardy (1999) is an instrument that focuses on psychological skills used by athletes in practice and competition, and is now used widely by sport psychology practitioners (Weinberg & Gould, 2011). Gucciardi and colleagues (2009, 2011) have developed sport specific instruments to measure mental toughness and have provided greater contextual understanding of this construct (Thomas, 2012). There has also been extensive research conducted on the measurement of perceptual-cognitive skills, such as attention, anticipation, and decision making that differentiate elite performers from others (Abernethy, Maxwell, Masters, Van Der Kamp, & Jackson, 2007).

Historical developments and recent advances in measurement tools provide important context for the examination of assessment in sport psychology. The next section of this paper will focus on current day criticisms, which will illuminate the need for a paradigm shift in sport psychology assessment.

Criticisms of Assessment in Sport Psychology

Despite advances over the course of the past two decades, criticisms of assessment in sport psychology remain. Some researchers have argued that sport psychology specific instruments measure arbitrary psychological constructs and are limited in real world applicability (Anderson, McCullagh, & Wilson, 2007). Others have noted that few psychometric tools used in sport psychology are calibrated against real world variables of interest, such as performance (Marchant, 2012). Test construction and other methodological concerns also persist. A long acknowledged problem in sport psychology testing is that athletes may tend to answer test items in a socially desirable manner, especially when testing is used for team selection (Morgan, 1980; Weinberg, 2011). Many inventories used in sport psychology do not include validity or social desirability scales, an important consideration when using tests for talent identification purposes. As of 2002, at least 314 sport psychology specific tests had been reported in research literature (Ostrow, 2002). Ostrow acknowledged that many of these studies lacked psychometric follow up studies and therefore posed serious limitations for test users. These questions regarding test reliability and validity have been persistent throughout the history of the field.

Others have raised concerns regarding ethical and cultural issues in sport psychology assessment. For example, researchers have acknowledged cultural biases in the meanings of complex constructs such as motivation, emotion, self, and identity and have aimed to clarify definitions and better understand their meanings across cultural contexts (Ryba, Schinke, & Stambulova, 2012). Another cultural concern is the use of measurement tools that have not been validated for the sample and situation being assessed (Weinberg, 2011). Many assessments used by sport psychology practitioners have a bias toward the population and environment for which they were developed, which are commonly White populations in North America or Europe

(Terry, 2009). For example, a test that was developed on a predominantly White population might be used with a mostly Latino or African American athlete population, which might lead to problems in interpretations of test results. Weinberg and Gould (2011) cautioned against the use of psychological assessment for the selection of athletes for a team, citing American Psychological Association guidelines, and called it an abuse of the assessment process. Weinberg (2011) noted that psychological tests have sometimes been abused in athletic settings, with athletes having been given no explanation for the purpose of testing and no feedback about the results and interpretation of test data.

Gardner and Moore (2006) outlined several recommendations to enhance the reliability and validity of psychological assessment in sport. These include the development of instrument expertise, understanding of the reliability and validity of specific tests, an emphasis on nomothetic comparison, and multimethod assessment methods that integrate information outside of testing such as observation and interviews. The utility of multimethod assessment has been championed in clinical assessment research as a method that enhances clinical value and maximizes assessment validity (Meyer et al., 2001).

Zhu (2012) echoed these thoughts and highlighted several other steps that can be taken to improve the quality of sport psychology measurement. These include better assessment training in graduate programs, greater promotion of assessment-specific research in the field, interdisciplinary thinking and collaboration, and the development of assessment tools with higher validity and reliability.

For some time, authors of sport psychology research articles and textbooks have promoted alternative and emerging epistemologies and methodologies in order to develop more useful psychological assessments in athletic settings (Gardner & Moore, 2006; Gibbs, 2010;

Thomas, 2012; Vealey & Garner-Holman, 1998). With this call to action in mind, this paper will present Therapeutic Assessment as a model that may address persistent concerns in sport psychology assessment, may act as a tool for athletic performance enhancement, and perhaps usher a paradigm shift in sport psychology service delivery. Previous research has shortcomings in that there has been a mismatch between standardized assessment measures and responsiveness to personal characteristics of the client, which if attended to, enhances real world application. The following section will provide an overview of Therapeutic Assessment and highlight how this form of assessment is responsive not only to client needs but also to the present need for evidence-based interventions in sport psychology.

Therapeutic Assessment

Therapeutic Assessment is an emerging but not yet well-known model of psychological assessment developed by Stephen Finn and his colleagues. The Therapeutic Assessment model is a semi-structured approach to collaborative psychological testing in which the assessment process *itself* is viewed as a brief yet powerful therapeutic intervention that facilitates greater self-understanding and personal growth in clients (Finn, 2006).

Finn and Tonsager (1997) theorized that Therapeutic Assessment benefits clients by confirming certain views they have of themselves, providing clients with new information about themselves to help them change in needed ways, giving clients a greater sense of self-efficacy, and helping clients feel deeply understood and accepted. Therapeutic Assessment can also help clients develop more accurate, compassionate, and useful stories about themselves and the world that allow them to explore new ways of living (Finn, 2006).

History of Therapeutic Assessment

Mental health professionals have traditionally viewed psychological testing exclusively as a means to diagnose psychological disorders and to plan treatment interventions (Finn, Fischer, & Handler, 2012). A number of psychologists throughout history have voiced objections to the use of psychological testing, calling it a dehumanizing, reductionistic, and judgmental process for clients (Finn and Tonsager, 1997). However, Finn et al. (2012) noted that since as early as the 1950s, psychologists were exploring ways that psychological assessment could work to promote therapeutic change by engaging clients in the assessment process.

In order for psychological assessment to gain recognition as an interventional tool, Finn and Tonsager (1997) stated that clinicians began to broaden their focus of attention beyond information collected from tests to include such aspects as rapport between the assessor and client, the context of the client's presenting issues, and the assessor's countertransference. Furthermore, clinicians began to challenge the notion that sharing test data and feedback with clients could cause harm. As assessors began to share feedback with clients more regularly, they began to report ways that clients benefited from the experience (Finn & Butcher, 1991).

In the 1970s, Constance Fischer began developing a model of psychological assessment grounded in phenomenological psychology, which she called collaborative psychological assessment or individualized psychological assessment (Finn et al., 2012). This model of psychological assessment regarded collaboration with clients as a way of individualizing the testing process so that descriptions and suggestions gleaned from data were interpreted within the client's life context. Fischer pioneered many practices that are now widely used by clinicians that employ Therapeutic Assessment (Finn et al., 2012). These include the writing of reports in first person and in easily understood language, asking clients for comments at the end of an

assessment, and writing fables for children at the end of an assessment that use metaphors to explain assessment results in age appropriate ways.

Fischer's advances in collaborative psychological assessment planted the seeds for the development of what is now known as Therapeutic Assessment. Developed by Stephen Finn and his colleagues at the University of Texas and at the Center for Therapeutic Assessment in Austin, Texas, Therapeutic Assessment refers to a collaborative assessment approach grounded in Fischer's human-science philosophy (Finn, 2006). Beginning in the early 1990s, Finn began to explore the utility of psychological assessment as a brief therapeutic intervention (Finn et al., 2012). Finn's early research focused on how to provide clients with understandable and personalized feedback as well as how to order the information presented to clients during feedback sessions to make those sessions most beneficial to them (Finn, 2006). Finn then began to focus on other steps of the assessment process and deliberately integrated several of Fischer's techniques when he came across her work (Finn et al., 2012). With an interest in teaching collaborative assessment to graduate students and in conducting controlled research on this topic, Finn began to standardize collaborative assessment techniques into a series of operationalized steps.

Therapeutic Assessment vs. Traditional Assessment

Finn and Tonsager (1997) highlighted the differences between traditional "information-gathering" psychological testing and Therapeutic Assessment. The primary goals of traditional assessment, according to the authors, are to clarify the diagnosis of disorders, outline and evaluate treatment plans, and to describe clients in terms of existing dimensions and categories that help facilitate communication between professionals. Although Therapeutic Assessment can serve these purposes as well, the primary goal is for clients to leave the assessment process

having gained new information about themselves and a new experience that fosters self-discovery, growth, and solving problems of living. Finn and Tonsager noted that the goals of Therapeutic Assessment parallel the objectives of psychotherapy, which include helping professionals validate, challenge, and change clients behavior and how they think and feel about themselves.

The process of assessment also differs between traditional assessment and Therapeutic Assessment. Finn and Tonsager (1997) noted that clinicians conducting a traditional psychological assessment battery generally utilize a three-step process that includes data collection, deductive interpretation of test data, and recommendations. The authors also noted that during the process of a traditional assessment, assessors typically share little information with clients with the exception of verbal feedback sessions or written reports. The process of Therapeutic Assessment varies radically from the traditional approach. Throughout the assessment process, assessors are committed to developing and maintaining empathy with clients, collaborating with clients to define assessment goals, and exploring test results with clients. Clients are considered essential collaborators throughout the assessment process, a tactic that is aimed to reduce the power differential between the assessor and client that is present in traditional assessment and to engage the client deeply in finding meaningful answers, according to Finn and Tonsager.

Traditional assessment and Therapeutic Assessment also differ in their view of psychological instruments (Finn & Tonsager, 1997). In the information-gathering model, psychological tests are viewed as instruments that provide standardized samples of client behavior. When test information is gathered, nomothetic comparisons and prediction of client behavior are made. Additionally, a test is highly valued when it demonstrates adequate

reliability, stability, and validity. Although statistical properties of tests are considered important in Therapeutic Assessment, tests are also viewed as opportunities for dialogue between assessor and clients and as tools for enhancing empathy for the subjective experiences of a client. Test results are often interpreted from idiographic as well as nomothetic perspectives.

Another area in which traditional assessment and Therapeutic Assessment differ is the focus of attention during the assessment process (Finn & Tonsager, 1997). In the information-gathering model, the focus of the assessment is on test scores and decisions that will be made following the assessment. Assessors generally place little or no attention on their own thoughts and feelings that arise while working with a client or to a client's subjective experience of taking a test. The development of rapport between assessor and client serves primarily to ensure the collection of valid and reliable data. In contrast to traditional models of assessment, the focus of attention in Therapeutic Assessment is on the client's subjective experience of the assessment process, the assessor's own subjective experience of the client, and on the relationship between the client and the assessor. In this way, the focus of the assessor closely parallels that of a psychotherapist.

The role of the assessor is also markedly different when contrasting traditional assessment models to Therapeutic Assessment, according to Finn and Tonsager (1997). The authors noted that assessors who employ a traditional assessment model are generally considered to be detached and objective observers who have relatively little influence on test data. Interactions with clients are often limited to administering tests, asking questions, and recording data. In contrast, Finn and Tonsager noted that assessors using Therapeutic Assessment are viewed as participant-observers who have an active and influential role in shaping the assessment process alongside their clients. The personality, appearance, theoretical orientation,

and other personal characteristics of the assessor are seen as factors that influence the assessment process.

A final aspect of assessment that Finn and Tonsager (1997) contrasted between traditional models of assessment and Therapeutic Assessment is what constitutes failure in the assessment process. According to the authors, assessors using traditional information-gathering models consider the assessment process a failure when information gathered is unreliable or invalid, wrong decisions are made about a client because of faulty data and misinterpretation of test results, and clients do not follow recommendations made by the assessor. In Therapeutic Assessment, Finn and Tonsager noted that failure occurs when a client does not feel respected, engaged, and appreciated by the assessor, when a client does not learn or experience new ways of being as a result of the assessment, and when a client feels less capable, invalidated, or even abused after the assessment process.

Format of Therapeutic Assessment

Finn et al. (2012) noted it was Finn's interest in teaching collaborative assessment to his graduate students and in conducting controlled research on the topic that led him to standardize assessment techniques into a series of explicit steps. Although Finn (2006) emphasized that Therapeutic Assessment does not necessarily produce greater benefits to clients than less structured forms of collaborative assessment, he suggested that it is somewhat easier to teach and research and helps clinicians navigate through the complexity of the assessment process. The Therapeutic Assessment model is comprised of six steps. Finn et al. (2012) noted that clinicians should not see these steps as fixed or absolute and emphasized that the model can be adjusted to fit each client and setting with client well-being always the priority.

Step 1 – Initial Session. During the initial session of Therapeutic Assessment, clinicians work collaboratively with clients to define individualized assessment goals. The assessor helps clients formulate questions, in their own words, that they wish the assessment to answer. According to Finn (2006), when psychological assessments are focused on the personal agenda of a client, the assessment process is more client-centered, which can lower the anxiety of clients and get them actively engaged and curious about the assessment process. During these initial sessions, helping clients become curious about their presenting issues and helping them translate their internal experience into concrete questions is paramount. As each question is formulated, the assessor gathers background information and evaluates the client's understanding of the presenting issue. At the end of this session, the assessor and client discuss the more practical and logistical aspects of the assessment process, such as cost, duration, confidentiality, how the results will be used, and to whom the results will be reported.

Step 2 – Standardized Testing Session(s). Following the initial session, the assessor and client meet for one or more sessions in which standardized tests are administered according to their respective standardized procedures. Maintaining the idea of individualized psychological assessment, there is no predetermined battery of tests (Finn, 2006). Instead, tests are selected primarily to answer the assessment questions determined during the initial session. Tests selected may also depend of the training, experience, and personal preference of the assessor. In Therapeutic Assessment, clients meet with assessors once or twice a week for up to two hours rather than for one marathon testing session. This is done to prevent clients from feeling overwhelmed and exhausted, to facilitate greater collaboration between client and assessor, and to allow time for the client to adjust to evolving understanding.

Although these sessions are similar in format to traditional psychological assessment sessions, Finn (2006) highlighted three techniques to consider when employing Therapeutic Assessment. One technique is to administer tests in the order of their face validity to the client's assessment questions. The purpose of this technique, according to Finn, is to demonstrate to clients that information collected is relevant to their assessment questions. For example, a client presenting with questions about depression would first complete a face valid inventory assessing depression symptoms. Another technique is to introduce each test with a comment on how the test is relevant to the client's assessment questions. A third technique, called the extended inquiry, is to ask clients after a test about their experience of taking the test, with special attention paid to experiences that shed light on the client's assessment questions.

Step 3 – Assessment Intervention Sessions. Following the standardized testing sessions, the assessor plans an assessment intervention session. Finn (1993) explained that one goal of Therapeutic Assessment is to give clients an opportunity to become aware of and explore findings gleaned from standardized tests that might otherwise be rejected in a summary/discussions session. Clients are given a chance to revise their own stories about themselves rather than having revisions suggested entirely by an assessor during a feedback session. Additionally, assessment intervention sessions serve to help the client and assessor work collaboratively to explore and test hypotheses derived from standardized testing. These sessions also provide opportunities for clients to explore how to adapt solutions to presenting issues into their everyday life context.

Finn (1993) proposed six steps for conducting assessment intervention sessions. He encouraged assessors to first select one major focus for each intervention session that is related to one of the client's assessment questions. Once this focus is selected, assessors begin the

session by telling clients which of their assessment questions will be addressed that day. The third step in conducting an assessment intervention session is an experiential one. The goal is to elicit, observe, and name the problem behavior. Once the assessor chooses a strategy that elicits the desired problem behavior, the goal is to bring this behavior to the attention of the client and help them recognize how this behavior exists in real-life contexts. The fourth step is to collaboratively explore with clients the context that leads to the problem behavior. Then, clients are asked to imagine solutions to their problem behavior and to experiment with and revise these proposed solutions until they feel workable. Finally, assessors discuss with clients how to concretely implement these solutions into their daily lives.

Step 4 – Summary and/or Discussion Sessions. The structure of summary/discussion sessions in Therapeutic Assessment is informed by Bill Swann's self-verification theory. This theory postulates that people have a desire to maintain current ideas or stories they have about themselves and will often minimize or ignore information that challenges these stories (Swann, 1996, 1997). According to Swann, this remains true even when a person's existing story is primarily negative. With this information in mind, Finn (1993) suggests that assessment feedback sessions begin with self-verifying information and gradually move to test findings that are less self-verifying. Finn added that presenting information in this way fosters an environment in which clients are better able to integrate new information into the ways they think about themselves and the world around them.

Schroeder, Hahn, Finn, and Swann (1993) suggested that clients are most able to integrate and make use of assessment information when it is presented in a three-tiered order. The first tier is what the authors called Level 1 findings. These include findings that verify clients' usual ways of thinking abut themselves and that clients will accept easily. Upon hearing

this feedback, a client might say, "That sounds just like me." The next type information introduced to clients is Level 2 findings. This includes information that reframes, modifies, or amplifies a client's usual way of thinking about themselves but does not threaten self-esteem or valued self-perceptions. Upon hearing this feedback, a client might say, "I've never thought of myself this way, but I can see how this fits." Finally, if the information presented to this point has been accepted well, Level 3 findings are introduced. Level 3 findings include information that is so incongruent with clients' usual ways of thinking about themselves that they are likely to be rejected or seen with a high level of skepticism. Finn (2006) cited research that many clients will continue to consider and integrate Level 3 information long after the assessment process is completed.

During these feedbacks sessions, assessors actively engage clients in dialogue about assessment findings and explicitly ask them to agree, disagree, and revise these findings (Finn, 2006). Assessors talk to clients about the meaning of test scores based on normative data and ask clients if these hypotheses are in line with their own experience and understanding of themselves. This interactive style of discussing assessment results has been shown to have greater benefits for clients than more traditional unilateral and assessor-driven presentations of test findings (Hanson, Claiborn, & Kerr, 1997). Ideally, at the end of the summary/discussion session, assessors and clients will have collaborated to construct joint answers to assessment questions and outline future directions clients can take to move forward in their lives.

Step 5 – Written Feedback is Provided. Following the summary/discussion sessions, the client is provided a written summary of the assessment results (Finn, 2006). Instead of more formal psychological reports, clients are written letters that address their assessment questions and reflect their input from summary/discussion sessions. Clients are invited to comment on or

correct this written summary of assessment results and to give feedback on the entirety of the testing experience.

Step 6 – Follow Up Sessions. Within two to three months of the final summary/discussion session, clients are invited to meet with the assessor again to talk about their assessment and discuss any questions or developments that have come up (Finn, 2006). Finn noted that these sessions are especially useful for clients who do not go into ongoing psychotherapy following the assessment.

Empirical Evidence for Therapeutic Assessment

In the first published study that explored the therapeutic utility of psychological testing, Finn and Tonsager (1992) examined the effects of administering a brief psychological assessment to clients awaiting psychotherapy at a university counseling center. As part of this randomized group comparison study, 32 clients participated in an initial interview, completed the Minnesota Multiphasic Personality Inventory-2 (MMPI-2), and received a one-hour summary and discussion session, while a control group 29 clients participated in an initial interview followed by two sessions of supportive, nondirective psychotherapy in lieu of testing. At the beginning of the study, the two treatment groups were equal in terms of self-reported symptomatic distress and self-esteem. At the end of their respective treatments and at a two-week follow up session, clients who participated in the MMPI-2 assessment reported a significant decline in symptomatic distress as well as significant increases in self-esteem and hopefulness.

The study by Finn and Tonsager (1992) was replicated and extended upon by Newman and Greenway (1997). Working with clients at a university counseling center in Australia, Newman and Greenway used a similar design to Finn and Tonsager (1992) but differed in that

the control group also completed the MMPI-2 but did not receive feedback until after the study was complete. Although the effect sizes were smaller than those in the Finn and Tonsager (1992) study, clients in the assessment group demonstrated clinically and statistically significant increases in self-esteem and decreases in symptomatic distress. It was concluded that the benefits experienced by assessment group clients was due to receiving test feedback, not to just having completed the MMPI-2.

Support has been demonstrated for Finn's (1996) claim that clients experience greater therapeutic gains when assessors present test feedback in the order of the client's existing self-concepts described above. Specifically, that is when clients are first presented feedback that closely matches their existing self-concept followed by feedback that is discrepant from these self-concepts, referred to by Finn as Levels 1, 2, and 3 findings. Schroeder et al. (1993) asked university students to estimate their standing relative to other students on four traits measured by the Multidimensional Personality Questionnaire (MPQ). The actual scores of each student on the relevant MPQ scales (Well-Being, Social Potency, Social Closeness, and Absorption) were determined. This, according to the authors, allowed for the computation of a difference score between students' self-reported expected trait levels and their actual test scores. These difference scores were used to guide the order of test feedback to students. All students in the study were first given feedback on a congruent trait; that is, a trait for which their self-perceived score matched their actual score. Students participating in the study were then randomly assigned to receive feedback on a second trait that was congruent, mildly discrepant, or high discrepant from their self-concepts. Results from this study indicated that those students who were given mildly discrepant feedback on the second trait felt more positively and more affected

by the assessment, both immediately following the feedback session and again at a two week follow-up session.

Ackerman, Hilsenroth, Baity, and Blagys (2000) compared clients receiving a modified version of Finn's Therapeutic Assessment to clients receiving a traditional psychological assessment. The two groups were compared in terms of the therapeutic alliance they had formed with their assessors as well as the likelihood they would follow through on treatment recommendations. It was found that clients receiving Therapeutic Assessment rated their relationship with the assessor as more positive, were more likely to follow through on treatment recommendations, and rated sessions as deeper and more powerful.

The positive effects of Therapeutic Assessment have been shown to extend into psychotherapy that follows an assessment (Hilsenroth, Peters, & Ackerman, 2004). These authors found that those that had received a collaborative assessment rated their alliance with their therapists significantly higher than those who had been administered a traditional psychological assessment.

Several studies have examined the effectiveness of interactive assessment feedback versus feedback that is delivered unilaterally by the assessor. For example, Hanson et al. (1977) found that clients generally rated collaborative assessment feedback as more satisfying and influential than feedback that was delivered with little client involvement. Additionally, providing a combination of oral and written feedback has been shown to have greater value than oral feedback alone (Lance & Krishnamurthy, 2003). These authors found that clients who had received a combination of oral and written feedback reported that they learned more about themselves, held their assessor in higher regard, and were generally more satisfied with their assessment experience.

More recent publications provided support for the assertion that Therapeutic Assessment can foster positive change in clients. Poston and Hanson (2010) conducted a meta-analysis of 17 published studies that examined the role of psychological assessment as a therapeutic intervention. Despite the fact that not all of the studies employed a full collaborative assessment approach much less a Therapeutic Assessment approach, the effect size for assessment outcome variables indicated moderate therapeutic significance.

Finn et al. (2012) provided a summary of 19 existing outcome research studies related to collaborative and Therapeutic Assessment. These studies demonstrated that collaborative models of assessment show positive effects with outpatient and inpatient clients facing a number of psychological difficulties. The authors noted the accrual of evidence demonstrating the utility of collaborative models while acknowledging the need for ongoing research in this field.

Therapeutic Assessment in Sport Psychology

Thus far, this paper has included a history of sport psychology, including its advances and shortcomings. A summary of Therapeutic Assessment, including history, format, and empirical support was also provided. The final portion of the paper will discuss how Therapeutic Assessment can address some of the aforementioned shortcomings in sport psychology assessment and potentially serve as method to enhance athletic performance.

Role of Tests

The traditional information-gathering model has been the dominant paradigm of assessment throughout the history of sport psychology. Along with this testing tradition comes an emphasis on standardized samples that allow for nomothetic comparisons, with high value placed on the reliability and validity of tests. As previously mentioned, reliability and validity of

tests used in sport psychology have remained a dominant issue raised by many authors and practitioners throughout the evolution of the field with persistent calls for tests to meet these standards (Dewey et al., 1989; Gardner & Moore, 2006; Morgan, 1980; Ostrow, 2002). It is these standards that have in part diminished the value of performance-based tests that do show strong reliability and validity as well as idiographic interpretations in sport psychology (Cox, 2007; Cratty, 1989). It is important to note that the term *projective* as a label for personality indicators has been rejected in the clinical assessment literature (Meyer & Kurtz, 2006). Instead, the term *performance-based personality* has been recommended (Kubiszyn et al., 2000). Projective tests are those that tap the psychological process of projection (which can be useful but is vulnerable to misinterpretation) whereas performance-based tests are those that evaluate a client's actual performance of a carefully constructed task using nomothetic means, which highly value psychometric reliability and validity, and are thus less likely to be misleading (H. Martin, personal communication, May 9, 2015).

Therapeutic Assessment can address these concerns, as the model takes a different stance on the value of tests, which values but goes beyond mere nomothetic comparison. Although statistical properties of tests are considered important in Therapeutic Assessment, tests are also viewed as opportunities for dialogue between assessor and clients and as tools for enhancing empathy for the subjective experiences of a client. Furthermore, test results are often interpreted from idiographic as well as nomothetic perspectives. According to Finn (1999):

> The pressure on the psychologist in the information-gathering model of assessment – to interpret test results unilaterally (i.e., without input from clients or others) in a way that yields the "Truth" about a client – is so great that we long for simple rules that help us appear "scientific" and "hard-minded." Unfortunately, when these rules are used rigidly,

they often result in conclusions that are less valid and reliable than do other methods that are more practical and based in common sense (pp. 57-58).

Finn (2002) added, "I think it's crucial that we shift our focus from researching exclusively test construction and validity, to learning more about what factors make psychological assessment useful and therapeutic for those involved" (p. 22).

Cultural Considerations

Similar to the use of assessment outside athletics, cultural considerations are another issue raised regarding the usage of psychological tests in sport psychology. The importance of understanding the cultural background of clients and awareness of test limitations regarding culture has been emphasized in the sport psychology literature (Etzel, Yura, & Purna, 1998; Watson, Etzel, & Vosloo, 2012). Of particular concern is that many tests used in sport psychology have not been normed for elite athletes (Weinberg, 2011) and there have been calls for greater awareness and consideration of athletic identity and culture (Cole & Tinsley, 2009; Harris, Altekruse, & Engels, 2003; Stambulova & Alfermann, 2009). Another cultural concern in sport psychology assessment is that many commonly used tests have an inherent bias toward the population and environment for which they were normed (Terry, 2009). These norms often do not represent the cultural diversity that is commonly present in athletic settings.

Therapeutic Assessment can also address the cultural concerns raised by the use of assessment in sport psychology (Finn, 2009). The model is appropriate for clients of different cultures, as assessment procedures are adapted to specific cultural contexts. Assessors that employ Therapeutic Assessment do not maintain fixed assumptions about the meaning of test scores nor apply blanket assumptions of cultural influences. Rather, clients are asked and

encouraged to help assessors understand how test findings relate to their personalized cultural influences, identities, and backgrounds.

Psychological Testing for Team Selection

A long-standing issue in sport psychology has been the use of tests for team selection, particularly personality measures (Williams & Straub, 2010; Razon & Tenenbaum, 2014). Caution has been raised about socially desirable response patterns (Morgan, 1980), especially when inventories are used for talent identification, while others have raised ethical concerns regarding the use of testing alone to select or cut athletes from a team (Weinberg & Gould, 2011). Furthermore, involuntary assessment of athletes also presents ethical concerns (American Psychological Association, 2010, Standard 3.10, Informed Consent) as well as the aforementioned test reliability issues.

In line with Fischer (1985, 1994), there are some testing situations when all that is required from an assessment are nomothetic descriptions of clients. Assessment for team selection purposes seems to fit this type of situation. Finn and Tonsager (1997) added that when clients are involuntarily assessed, attempting to achieve therapeutic goals could be inefficient, costly, and likely frustrating for clients. Still, techniques of Therapeutic Assessment, such organizing test feedback, can be applied. Finn (2007) encouraged assessors to invoke the "spirit" of Therapeutic Assessment with involuntary clients in order to establish goodwill and to keep clients from feeling abused by the assessment process. Finn (2009) identified six core values of Therapeutic Assessment that reflect this spirit, including collaboration, respect, humility, compassion, openness, and curiosity.

Trends in Sport Psychology and a Place for Therapeutic Assessment

It may be that the time and place for Therapeutic Assessment is not during player selection, but instead after the selection process has taken place. Sport psychology practitioners have increasingly embraced an interactional approach, understanding the behavior of athletes as the product of contextual factors and personal characteristics (Thomas, 2012). Some have advocated for holistic treatment approaches that address performance specific issues while also considering the overall psychological well-being of athletes across life domains. Taylor (2012), for example, defined his approach to sport psychology work as the athlete-as-performer/athlete-as-person model. While the first approach focuses on teaching traditional performance enhancement strategies (i.e., imagery, concentration techniques, self-talk, etc.), the athlete-as-person approach addresses personal obstacles that prevent athletes from performing at their best (i.e., perfectionism, fear of failure, relationship concerns, eating disorders, etc.). Henschen (2012) added that his approach is based on "whole person development" and that skills taught to clients are "life skills" to be implemented not only in sport but also across life domains. Balague (2012) conveys to clients that the individual as a whole matters, not just the athlete, and encourages athletes to discuss issues outside of sport during session. As the therapeutic relationship matures, Balague noted that sessions become increasingly holistic and at times existential, with life mission and values taking center stage. Taylor, Henschen, and Balague represent three of many practitioners whom have advocated for greater focus on personal as well as performance issues, which are often interrelated. It is noteworthy that Taylor, Henschen, and Balague have gained international recognition as preeminent practitioners who have contributed meaningfully to the field of sport psychology (Aoyagi & Poczwardowski, 2011).

More holistic approaches to sport psychology interventions would seem to undermine traditionally held views about the lack of utility for personality inventories and performance-based measures. Nideffer and Sagal (2001), represent this view, stating that "the use of instruments such as the Minnesota Multiphasic Personality Inventory and the Rorschach with athlete populations is extremely difficult to justify. The constructs measured by these instruments have no direct relationship to performance" (p. 173). This view ignores the potential therapeutic power of many psychological tests if they are used appropriately, ethically, and, as proposed by this paper, when employing the Therapeutic Assessment model.

Despite traditionally held views and resistance to performance-based psychological measures in sport psychology, some have questioned the premise that performance-based tests have limited value (Cox, 2007; Gibbs, 2010). The development of the Athlete Apperception Technique (AAT; Gibbs, Marchant, & Andersen, 2005) is one attempt at the construction of a sport-specific performance-based measure that allows practitioners to gain an idiographic understanding of athlete behavior. With an exclusive focus on overt behavior and self-reported traits of athletes along with the emphasis on the psychometric inadequacies of projective techniques, sport psychology practitioners could miss out on valuable information that can better serve clients both personally and in a performance context. These measures, in conjunction with other tests, can help to increase self-awareness. Ravizza (2010) stated that self-awareness is key to enhancing self-regulation, skill development, and is required for obtain peak performance.

Future Directions

Therapeutic Assessment represents a paradigm shift in psychological assessment that addresses many of the limitations, reservations, and concerns related to traditional assessment.

These limitations, reservations and concerns mirror those that have been present in sport psychology assessment. Finn and Martin (1997) described the model as "collaborative, interpersonal, focused, time-limited, and flexible" (p. 134) as well as economically efficient. These strengths add to the potential value of Therapeutic Assessment for use in sport psychology.

As the field of sport psychology continues to mature, there appears to be greater appreciation for diversity in training models and openness to approaches beyond the cognitive-behavioral paradigm (Gibbs, 2010). To promote advancement of assessment in the field, Vealey & Garner-Holman (1998) called on researchers and practitioners to "embrace alternative and emerging epistemologies and methodologies" (p. 442). Zhu (2012) cited the need for interdisciplinary thinking and collaboration in order to improve assessment in sport psychology. Gardner and Moore (2007) cited a need for more empirically supported inventions in sport psychology. With these calls to action in mind, Therapeutic Assessment stands out as a model that meets these calls, can address many of the limitations present in sport psychology assessment, and perhaps initiate a paradigm shift in sport psychology service delivery. Therapeutic Assessment stands out as a model that warrants greater attention from sport psychology researchers and clinicians.

References

Abernethy, B., Maxwell, J. P., Masters, R. S. W., Van Der Kamp, J., & Jackson, R. C. (2007). Attentional processes in skill learning and expert performance. In G. Tenenbaum, & R. C. Eklund (Eds.), *Handbook of sport psychology* (3rd ed., pp. 245-263). New York: Wiley.

Ackerman S. J., Hilsenroth, M. J., Baity, M. R., & Blagys, M. D. (2000). Interaction of therapeutic process and alliance during psychological assessment. *Journal of Personality Assessment*, *75*, 82-109.

American Psychological Association. (2010). *Ethical principles of psychologists and code of conduct (2002, Amended June 1, 2010)*. Retrieved from http://www.apa.org/ethics/code/index.aspx

Andersen, M. B., McCullagh, P., & Wilson, G. J. (2007). But what do the numbers really tell us? Arbitrary metrics and effect size reporting in sport psychology research. *Journal of Sport & Exercise Psychology*, *29*, 664-672.

Anshel, M. H., & Lidor, R. (2012). Talent detection programs in sport: The questionable use of psychological measures. *Journal of Sport Behavior*, *35*, 239-266.

Aoyagi, M. W., & Poczwardowski, A. (2011). *Expert approaches to sport psychology: Applied theories of performance excellence*. Morgantown, WV: Fitness Information Technology.

Balague, G. (2012). Dr. Gloria Balague: University of Illinois at Chicago. In M. W. Aoyagi & A. Poczwardowski (Eds.), *Expert approaches to sport psychology: Applied theories of performance excellence* (pp. 1-18). Morgantown, WV: Fitness Information Technology.

Cole, K. W., & Tinsley, T. M. (2009). Sports counseling. In American Counseling Association (Ed.), *The ACA encyclopedia of counseling* (pp. 522-524). Alexandria, VA: American Counseling Association.

Cox, R. H. (2007). *Sport psychology: Concepts and applications* (6th ed.). New York: WCB/McGraw-Hill.

Cratty, B.J. (1989). *Psychology in contemporary sport* (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall.

Cumming, J., & Duda, J. L. (2012). Profiles of perfectionism, body-related concerns, and indicators of psychological health in vocational dance students: An investigation of the 2 x 2 model of perfectionism. *Psychology of Sport and Exercise, 13,* 729-738.

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.

Etzel, E., Yura, M., & Perna, F. (1998). Ethics and testing in applied sport psychology. In J. Duda (Ed.), Advances in measurement in sport and exercise psychology (pp. 423-432) Morgantown, WV: Fitness Information Technology.

Fischer, C. T. (1994). *Individualizing psychological assessment*. Hillsdale, NJ: Erlbaum. (original work published 1985)

Finn, S. E. (1993, March). *Using "softer" tests to demonstrate MMPI-2 findings to clients in treatment planning*. Paper presented at the 28th Annual Symposium on Recent Developments in the Use of the MMPI, MMPI-2, and MMPI-A, St. Petersburg Beach, FL. Reprinted in Finn, S. E. (2007). *In our clients' shoes: Theory and techniques of Therapeutic Assessment* (pp. 83-96). Mahwah, NJ: Erlbaum.

Finn, S. E. (1996). Assessment feedback integrating MMPI-2 and Rorschach findings. *Journal of Personality Assessment, 67,* 543-557. Reprinted in Finn, S. E. (2007). *In our clients' shoes: Theory and techniques of Therapeutic Assessment* (pp. 65-82). Mahwah, NJ: Erlbaum.

Finn, S. E. (1999, March). *Giving clients feedback about "defensive" test protocols: Guidelines from Therapeutic Assessment.* Paper presented at the Society for Personality Assessment annual meeting, New Orleans, LA. Reprinted in Finn, S. E. (2007). *In our clients' shoes: Theory and techniques of Therapeutic Assessment* (pp. 55-64). Mahwah, NJ: Erlbaum.

Finn, S. E. (2002, March). *The power and potential of psychological assessment.* Presidential address to the annual meeting of the Society for Personality Assessment, San Antonio, TX. Reprinted in Finn, S. E. (2007). *In our clients' shoes: Theory and techniques of Therapeutic Assessment* (pp. 17-31). Mahwah, NJ: Erlbaum.

Finn, S. E. (2006, March). *Therapeutic assessment: Definitions, distinctions, and current developments*. Master lecture presented at the annual meeting of the Society for Personality Assessment, San Diego, CA. Reprinted in Finn, S. E. (2007). *In our clients' shoes: Theory and techniques of Therapeutic Assessment* (pp. 3-15). Mahwah, NJ: Erlbaum.

Finn, S. E. (2007). *In our clients' shoes: Theory and techniques of Therapeutic Assessment*. Mahwah, NJ: Erlbaum.

Finn, S. E. (2009). *What are the core values of Therapeutic Assessment?* Downloaded from www.therapeuticassessment.com on January 15, 2015.

Finn, S. E., & Butcher, J. N. (1991). Clinical objective personality assessment. In M. Herson, A. E. Kazdin, & A. S. Bellack (Eds.), The clinical psychology handbook (2nd ed., pp. 362-373). New York: Pergamon Press.

Finn, S. E., Fischer, C. T., & Handler, L. (2012). Collaborative/Therapeutic Assessment: Basic

concepts, history, and research. In S. E. Finn, C. T. Fischer, & L. Handler (Eds.),

Collaborative/Therapeutic Assessment: A casebook and guide (pp. 1-24). Hoboken, NJ:

John Wiley & Sons.

Finn, S. E., & Martin, H. (1997). Therapeutic assessment with the MMPI-2 in managed health

care. In J. N. Butcher (Ed.), *Objective psychological assessment in managed health care:*

A practitioner's guide (pp. 131-152). New York: Oxford University Press.

Finn, S. E., & Tonsager, S. E. (1992). The therapeutic effects of providing MMPI-2 test

feedback to college students awaiting psychotherapy. *Psychological Assessment, 4,* 278-

287.

Finn, S. E., & Tonsager, M. E. (1997). Information-gathering and therapeutic models of

assessment: Complementary paradigms. *Psychological Assessment, 9,*374-385.

Fletcher, D., & Sarkar, M. (2012). A grounded theory of psychological resilience in Olympic

champions. *Psychology of Sport and Exercise, 13,* 669-678.

Fuchs, A. F. (1998). Psychology and the "Babe." J*ournal of the History of the Behavioral*

Sciences, *34*(2), 153-165.

Gardner, F. L., & Moore, Z. E. (2006). *Clinical sport psychology*. Champaign, IL: Human

Kinetics.

Gardner, F. L., & Moore, Z. E. (2007). The psychology of enhancing human performance: The

mindfulness-acceptance-commitment (MAC) approach. Springer: New York.

Gibbs, P. (2010). Psychological assessment: Projective techniques. In S. J.

Hanrahan & M. B. Andersen (Eds.), *Routledge handbook of applied sport*

psychology (pp. 101-110). London: Routledge.

Gibbs, P. M., Marchant, D., & Andersen, M. B. (2005). Development of the Athlete

    Apperception Technique (AAT). In T. Morris et al. (Eds.), *ISSP 11th World Congress of*

    Sport Psychology: Promoting health and performance for life (3 pages), CD-ROM.

    Austraila: International Society of Sport Psychology.

Gould, D., & Pick, S. (1995). Sport psychology: The Griffith era, 1920-1940. *The Sport*

    Psychologist, *9*, 391-405.

Green, C. D. (2003). Psychology strikes out: Coleman R. Griffith and the Chicago

    Cubs. *History of Psychology, 6*(3), 267-283.

Gucciardi, D. F., Gordon, S., & Dimmock, J. A. (2009). Development and preliminary

    validation of a mental toughness inventory for Australian football. *Psychology of Sport*

    and Exercise, *10*, 201-209.

Gucciardi, D. F., & Gordon, S. (Eds.) (2011). *Mental toughness in sport: Developments in*

    theory and research. London: Routledge.

Hanson, W. E., Claiborn, C. D., & Kerr, B. (1997). Differential effects of two test-

    interpretation styles in counseling: A field study. *Journal of Counseling Psychology*, *44*,

    400-405.

Harris, H. L., Altekruse, M. K., Engels, D. W. (2003). Helping freshman student athletes

    adjust to college life using psychoeducational groups. *Journal for Specialists in Group*

    Work, *28*, 64-81.

Hatfield, B. D., & Landers, D. M. (1983). Psychophysiology – A new direction for sport

    psychology. *Journal of Sport Psychology*, *5*, 243-259.

Heil, J., & Henschen, K. (1996). Assessment in sport and exercise psychology. In J. L.

Van Raalte & B. B. Brewer (Eds.), *Exploring sport and exercise psychology* (pp. 229-

255). Washington, DC: American Psychological Association.

Henschen, K. (2012). Dr. Keith Henschen: Professor emeritus, University of Utah. In M. W.

Aoyagi & A. Poczwardowski (Eds.), *Expert approaches to sport psychology: Applied*

theories of performance excellence (pp. 91-105). Morgantown, WV: Fitness Information

Technology.

Hilsenroth, M., Peters, E., & Ackerman, S. (2004), The development of therapeutic alliance

during psychological assessment: Patient and therapist perspectives across

treatment. *Journal of Personality Assessment*, *83,* 331-344.

Kroll, W., & Lewis, G. (1970). America's first sport psychologist. *Quest*, *13*, 1-4.

Kubiszyn, T. W., Meyer, G. J., Finn, S. E., Eyde, L. D., Kay, G. G., Moreland, K. L., … Eisman,

E. J. (2000). Empirical support for psychological assessment in clinical health care

settings. *Professional Psychology: Research and Practice*, *31*, 119–130.

Lance, B. R., & Krishnamurthy, R. (2003, March). *A comparison of three modes of MMPI-2*

test feedback. Paper presented at the annual meeting of the Society for Personality

Assessment, San Francisco, CA.

Mahoney, M. J., Gabriel, T. J., Perkins, T. S. (1987). Psychological skills and exceptional

athletic performance. *The Sport Psychologist*, *1*, 181-199.

Marchant, D. B. (2010). Psychological assessment: Objective/self-report measures. In S. J.

Hanrahan & M. B. Andersen (Eds.), *Routledge handbook of applied sport*

psychology (pp. 111-119). London: Routledge.

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

McNair, D. M., Lorr, M., & Droppleman, L. F. (1981). *Profile of Mood States*. San Diego: Educational and Industrial Testing Service.

Meyer, G. J., Finn, S. E., Eyde, L. D., Kay, G. G., Moreland, K. L., Dies, R. R., ... Reed, G. M. (2001). Psychological testing and psychological assessment: A review of evidence and issues. *American Psychologist*, *56*(2), 128-165.

Meyer, G. J., & Kurtz, J. E. (2006). Advancing personality assessment terminology: Time to retire "objective" and "projective" as personality test descriptors. *Journal of Personality Assessment*, *87*, 223–225.

Morgan, W. P. (1980). Sport personalogy: The credulous-skeptical argument in perspective. In W.F. Straub (Ed.), *Sport psychology: An analysis of athlete behaviour* (2nd ed., pp. 330-339). Ithaca, NY: Mouvement Publications.

Morgan, W. P., Brown, D. R., Raglin, J. S., O'Connor, P. J., & Ellickson, K. A. (1987). Psychological monitoring of overtraining and staleness. *British Journal of Sports Medicine*, *21*, 107-114.

Newman, M. L., & Greenway, P. (1997). Therapeutic effects of providing MMPI-2 test feedback to clients at a university counseling service. *Psychological Assessment, 9,* 122-131.

Nideffer, R. M., Sagal, M.-S. (2001). *Assessment in sport psychology*. Morgantown, WV: Fitness Information Technology.

Ostrow, A. C. (Ed.). (1990, 2002). *Directory of psychological tests in sport and exercise sciences*. Morgantown, WV: Fitness Information Technology.

Poston, J. M. & Hanson, W. E. (2010). Meta-analysis of psychological assessment as a therapeutic intervention. *Psychological Assessment*, *22*, 203-212.

Ravizza, K. (2010). Increasing awareness for sport performance. In J. M. Williams (Ed.), *Applied sport psychology: Personal growth to peak performance* (6th ed., pp. 189-200). Boston: McGraw-Hill.

Razon, S., & Tenenbaum, G. (2014). Measurement in sport and exercise psychology. In J. L. Van Raalte & B. B. Brewer (Eds.), *Exploring sport and exercise psychology* (pp. 279-309). Washington, DC: American Psychological Association.

Ryba, T. V., Schinke, R. J., & Stambulova, N. B. (2012). Cultural sport psychology: Special measurement considerations. In G. Tenenbaum, R. C. Eklund, & A. Kamata (Eds.), *Measurement in sport and exercise psychology* (pp. 143-152). Champaign, IL: Human Kinetics.

Schroeder, D. G., Hahn, E. D., Finn, S. E., & Swann, W. B., Jr. (1993, June). *Personality feedback has more impact when mildly discrepant from self-views*. Paper presented at the fifth annual convention of the American Psychological Society, Chicago, IL.

Stambulova, N. B., & Alfermann, D. (2009). Putting culture into context: Cultural and crosscultural perspectives in career development and transition research and practice. *International Journal of Sport and Exercise Psychology*, *7*(3), 292–308.

Stoeber, J. (2011). The dual nature of perfectionism in sports: Relationships with emotion, motivation, and performance. *International Review of Sport and Exercise Psychology, 4,* 128-145.

Swann, W. B., Jr. (1996). *Self-traps: The elusive quest for higher self-esteem*. New York: Freeman.

Swann, W. B., Jr. (1997). The trouble with change: Self-verification and allegiance to the self. *Psychological Science*, *8*, 177-180.

Taylor, J. (2012). Dr. Jim Taylor: Private practice, San Francisco, CA. In M. W. Aoyagi & A. Poczwardowski (Eds.), *Expert approaches to sport psychology: Applied theories of performance excellence* (pp. 217-234). Morgantown, WV: Fitness Information Technology.

Tenenbaum, G., & Bar-Eli, M. (1995). Contemporary issues in exercise and sport psychology research. In S. J. H. Biddle (Ed.), *European perspectives on sport and exercise psychology* (pp. 292-323). Champaign, IL: Human Kinetics.

Terry, P. C. (2009). Strategies for reflective cultural sport psychology practice. In R. J. Schinke & S. J. Hanrahan (Eds.), *Cultural Sport Psychology* (pp. 79-89). Champaign, IL: Human Kinetics.

Thomas, P. R. (2012). Using psychological tests to enhance skills in sport and performing arts. *InPsych*, *34*(6), 16-17.

Thomas, P. R., Murphy, S. M., & Hardy, L. (1999). Test of Performance Strategies: Development and preliminary validation of a comprehensive measure of athletes' psychological skills. *Journal of Sports Sciences, 17,* 697-711.

Vealey, R. S., & Garner-Holman, M. (1998). Applied sport psychology: Measurement issues. In J. L. Duda (Ed.), *Advances in sport and exercise psychology measurements* (pp. 433-446). Morgantown, WV: Fitness Information Technology.

Watson, J., Etzel, E. & Vosloo, J. (in press). Ethics assessment and measurement in sport and exercise psychology. In G. Tenenbaum (Ed.), *Handbook of measurement in sport and exercise psychology*. Champaign, IL: Human Kinetics.

Weinberg, R.S. (2011). Psychological measurements in sports and exercise. In J. R Morrow, Jr., A. W. Jackson, J. G. Disch, & D. P. Mood, *Measurement and evaluation in human performance*. Champaign, IL: Human Kinetics.

Weinberg, R. S., & Gould, D. (2003). Welcome to sport and exercise psychology. In R. S. Weinberg & D. Gould, *Foundations of sport and exercise psychology* (3rd ed., pp. 3-23). Champaign, IL: Human Kinetics.

Weinberg, R. S., & Gould, D. (2011). Introduction to psychological skills training. In R. S. Weinberg & D. Gould, *Foundations of sport and exercise psychology* (5th ed., pp. 247-269). Champaign, IL: Human Kinetics.

Williams, J. M, & Straub, W. F. (2010). Sport psychology: Past, present, and future. In J.M. Williams (Ed.), *Applied sport psychology: Personal growth to peak performance* (6th ed., pp. 1-17). New York: McGraw-Hill.

Woodman, T., Roberts, R., Hardy, L., Callow, N., & Rogers, C. H. (2011). There is an "I" in TEAM: Narcissism and social loafing. *Research Quarterly for Exercise and Sport, 82,* 285-290.

Woodman, T., Zourbanos, N., Hardy, L., Beattie, S., & McQuillan, A. (2010). Do performance strategies moderate the relationship between personality and training behaviours? An exploratory study. *Journal of Applied Sport Psychology, 22,* 183-197.

Zhu, W. (2012). Measurement practice in sport and exercise psychology: A historical, comparative, and psychometric view. In G. Tenenbaum, R. C. Eklund, & A. Kamata (Eds.), *Measurement in sport and exercise psychology* (pp. 143-152). Champaign, IL: Human Kinetics.