Victoria University

Australian Athletes' Perceptions of Sport Psychology Services

By

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Dedication

I would like to dedicate my Masters of Science (Sport Psychology) to my loving wife Anna Harris. Within 18 months of commencing, we endured the pain of Anna's mother passing away unexpectedly, and in the last 12 months we have experienced the indescribable joy of the arrival of our beautiful baby girl, Lucy Tayla Harris. Throughout this period, Anna has been a constant source of strength for me by dealing with life's challenges and concurrently supporting this work.

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Abstract

North American researchers have examined athletes' perceptions regarding the use of sport psychology services, however, similar studies have not been conducted in Australia. The aims of this thesis were to investigate perceptions of sport psychology services with Australian athletes and to assess the psychometric properties of the Sport Psychology Attitude Questionnaire (SPAQ: Harmison, 1999). Despite the professional advancements, North American research has shown that a number of factors may contribute to negative perceptions and stigmatisation of athletes who seek sport psychology services. Based on previous research a number of hypotheses were formulated. Female athletes and athletes with previous exposure to sport psychology were expected to be significantly more receptive to sport psychology services. A sample of 179 male (n = 117) and female (n = 62) athletes, ranging in age from 17 to 69 years, competing in either amateur or professional sport completed the 25-item SPAQ and a demographics questionnaire. To examine athletes' perceptions, a 2 (gender) x 2 (level of sport psychology exposure) Multivariate Analysis of Variance (MANOVA) was conducted with the three SPAQ factors, confidence in sport psychology (11 items), stigma tolerance (6 items), and preference for similarity (8 items) as the dependent variables. Contrary to expectations male athletes were more confident in using the services of a sport psychologist than were female athletes F (1, 175) = 6.02, p = .015 p < .05, ES = 0.03. As expected athletes who had previous sport psychology consultation experience were more confident in using sport psychology services than those without previous experience F (1, 175) = 15.64, p < .001, ES = 0.08. The descriptive results showed that athletes in the present study were moderately positive regarding the use of sport psychology services. Internal consistency (Cronbach alpha) for the SPAQ overall score (α = .74) and confidence in sport psychology (α = .82) sub-scale were acceptable. Alpha coefficient estimates for stigma

tolerance (α = .55) and preference for similarity (α = .35) were poor. A confirmatory factor analysis (CFA) did not confirm the factor structure of the SPAQ, therefore, an exploratory principal components (PCA) analysis was performed. A five-factor solution (i.e., confidence to help with performance, recognition of personal need, sport psychologist and athlete likeness, stigma of using a sport psychology consultant, and interpersonal similarity) was extracted with an overall response variance of 51.5% incorporated 24 of the 25 items in the SPAQ. Thus, the Harmison model did not prove robust using CFA or PCA. Further item development and rewording of current items is needed before the SPAQ is likely to be a reliable instrument to measure athletes' perceptions of sport psychology services. Additional research of Australian athletes' perceptions of sport psychology services is required to confirm the findings of participants in this study.

CHAPTER 1

Introduction

The use of sport psychology services in professional and amateur sports is growing (Loehr, 1990), however, the number of people making a substantial part of their living from sport psychology service delivery is relatively low (Aldridge, Andersen, Stanton, & Shen, 1997; Andersen, Williams, Aldridge, & Taylor, 1997). Sport psychology has, however, expanded significantly with sport psychology consultants (SPCs) providing services to professional and amateur athletes and coaches from recreational sport to Olympic-level competition (Murphy & Ferrante, 1989; Partington & Orlick, 1991). Increased media exposure and publications of sport psychology related materials have also contributed to increased use of sport psychology services (Silva, 1989; Vealey, 1988, 1994). Smith (1989) suggested this increased interest in sport psychology, should be accompanied by clear benefits to recipients of sport psychology services.

The communication of current sport psychology research and knowledge within professional organisations has also grown steadily over the last 30 years (Landers, 1995; Williams, 1998). Sport psychology bodies include organisations founded in the 1960's such as the International Society of Sport Psychology (ISSP; 1965) and North American Society for the Psychology of Sport and Physical Activity (NASPSPA; 1967). Applied sport psychology developed more specifically with the formation of the Association for the Advancement of Applied Sport Psychology (AAASP) in 1985. In 1986, sport psychology was recognised within the American Psychological Association (APA) as Division 47 (Exercise and Sport Psychology). In Australia, the Australian Psychological Society (APS; 1966), recognised the College of Sport Psychologists (CoSP) as a bonafide college in 1991. Similar to the origins of sport psychology in North America, sport psychology in Australia was perceived as being a profession somewhere between

psychology and physical education (Abernethy, Bond, Glencross, Grove, & Salmela, 1992). The purpose of CoSP is to promote sport psychology in Australia by providing professional guidance. The key objectives of CoSP according to Morris (1995) are determining appropriate qualifications needed to practice, ensuring academic status is maintained, supporting adherence to the APS Code of Conduct, and defining the range and type of services sport psychologists provide. CoSP was also established to review the development of potential career opportunities and monitor ongoing ethical issues that may arise with psychological interventions provided in the sport and exercise field. For example, CoSP provide guidelines for sport psychology consultation fees and dealing with confidentiality matters relating to individual and team sports (Kirkby, 1995; Morris).

Despite the professional advancements of sport psychology, researchers have shown that negative perceptions regarding sport psychology services and stigmatisation of participants who seek psychological assistance is common (Linder, Brewer, Van Raalte, & De Lange, 1991). During the past two decades, sport psychology researchers have addressed issues of service delivery and the perceptions held by the public, coaches, and athletes towards the use of sport psychology services (Martin, Wrisberg, Beitel, & Lounsbury, 1997; Schell, Hunt, & Lloyd, 1984; Silva, 1984; Van Raalte, Brewer, Brewer, & Linder, 1992; Van Raalte, Brewer, Linder, &, DeLange, 1990). Perceptions of sport psychology services has been examined and specific results reported depending on the variables that have been examined (e.g., gender, race, previous psychology experience, position played in sport). In addition, a number of studies in mainstream psychology have reported on negative perceptions often associated with receiving psychotherapy services (Fischer & Turner, 1970; Furnham & Wardley, 1990; Wong 1994). Researchers investigating public perceptions of athletes who seek a SPC have found that athletes may be stigmatised after consulting with a sport psychologist (Linder et al., 1989, 1991;

Ogilvie, 1977). Researchers have also attempted to assess the attitudes of the public, coaches, and athletes towards using sport psychology services to help identify what factors might be responsible for individuals not seeking assistance (Linder et al., 1989, 1991; Van Raalte et al., 1992).

Initial attempts to assess attitudes towards sport psychologists used indirect measures. The criterion of measurement initially was participants responding to a fictitious scouting report regarding an athlete. For example, in one study university students were asked to rate the draft suitability of a player depending on whether the player had consulted their coach or a sport psychologist for a performance consistency problem (Linder et al., 1989, 1991). Linder et al found that participants rated the draft suitability of a player lower if they had consulted a sport psychologist rather than their coach. Wrisberg and Martin (1994) developed a questionnaire to provide a more objective measure of athletes' perceptions of sport psychological skills. Martin et al. (1997) later refined the instrument that is now known as the Athletes' Attitudes Toward Seeking Sport Psychology Consultation Questionnaire (ATSSPCQ). Martin et al. suggested the ATSSPCQ was tapping into the following constructs: (a) confidence in sport psychology, (b) stigmatisation, (c) interpersonal openness, (d) recognition of need, and (e) social desirability.

Martin et al. (1997) recruited a sample of 225 American University athletes who completed the ATSSPCQ, and principal components factor analysis was conducted to identify what sources of prejudice account for the reluctance to use psychological services. The dimensions identified were stigma tolerance (factor 1), confidence in sport psychology consultation/recognition of need (factor 2), and interpersonal openness/willingness to try a sport psychology consultation (factor 3). A three-factor solution accounted for 35% of the overall response variance resulted from principal

components analysis with varimax rotation. All 50 items with factor loadings of .23 or greater were retained.

Harmison (1999) replicated and extended Martin et al.'s (1997) research by measuring the perceptions of 405 students from 11 National Collegiate Athletic Association (NCAA) Division I, II, and III schools. Harmison conducted an exploratory factor analysis on the ATSSPCQ to further explore the factor structure. Principle factor analysis with oblique rotation produced a three-factor solution that accounted for 29% of the overall response variance. The factors were: (a) confidence in sport psychology, (b) stigma tolerance, and (c) preference for similarity. Factor loadings of .40 or greater were retained and resulted in the measure being revised to a three factor 25-item Sport Psychology Attitude Questionnaire (SPAQ). Two factors, confidence in sport psychology and stigma tolerance were identified were common factors in both the ATSSPCQ and SPAQ. Interpersonal openness/willingness to try sport psychology, however, was replaced by preference for similarity.

The research regarding acceptance of sport psychology service delivery is fairly limited in terms of sample selection. Most of the studies used to explore perceptions of sport psychologists and sport psychology services have used American university students, coaches, and athletes as participants (e.g., Linder et al., 1989, 1991; Martin et al., 1997; Van Raalte et al., 1992), or North American sport psychologists (e.g., Partington & Orlick, 1991). Australian research regarding perceptions of psychological services is relatively sparse. Studies conducted approximately 25 years ago focused on mainstream psychological services and investigated the general public's understanding of the differences between psychologists and psychiatrists and the level of confidence that exists towards psychological services (Small & Gault, 1975; Wilkinson et al., 1978).

There has been no research, however, examining the perceptions of sport psychological services from the perspective of Australian athletes.

The perceptions of Australian athletes may not necessarily mirror perceptions of North American athletes. There are obvious similarities in the development of sport psychology in Australia and North America, such as the establishment of sport psychology associations and the origins of sport psychology forming predominantly within physical education departments rather than psychology faculties (Morris, 1995; Silva & Weinberg, 1984). There are, however, several differences between the establishment, growth and delivery of sport psychology in Australia compared to North American. Sport psychology in North America has a significantly longer history of research, interest in the field having began late in the 19th century, applied work dates back to the 1920s, professional associations were established in the 1960s, and sport participation and progression to elite representation follows the university NCAA model. Sport psychology interest in Australia began in the 1960s, the formation of associations and consciousness of sport psychology among the sport science community did not formally occur until the 1980s, and athletes participate and progress to elite level sport in Australia via local clubs and teams rather than university representation (Kirkby, 1995; Morris). Australian elite athletes also frequently use either state or national institute training facilities and resources including sport psychology services.

The primary purpose of the present study was to extend the studies conducted by Martin et al. (1997) and Harmison (1999) in the Australian context and to further test the psychometric properties of the SPAQ. In the present study the perceptions of Australian male and female athletes with and without previous sport psychology experience was examined. By closely examining the understanding and perceptions of Australian athletes

toward sport psychology services, sport psychologists should be able to address the barriers to wider acceptance in a more informative and specific manner.

CHAPTER 2

Review of Literature

Over the past century, psychology has undergone a significant period of change, particularly with regard to the development, structure, and perceptions of applied psychological practice. In the early years psychological practice was driven largely by the major developing schools of thought such as: psychodynamic approaches, behaviourism, cognitive psychology, humanistic and phenomenological approaches (Brennan, 1995; Murphy & Kovack, 1972). The focus of psychology, as an evolving science largely was the development of methodology for treating people. At this early stage there was relatively little concern about public perceptions of services and more broadly how the profession was being perceived (Benjamin, 1986; Murray, 1983). Identifying what the public perceives regarding service delivery is nowadays important to ensure practitioners are able to meet the needs of people being serviced (Benjamin; Pallak & Kilburg, 1986; Small & Gault, 1975; Wood, Jones, &, Benjamin, 1986).

A key factor in successful service delivery is the client's understanding of what assistance a psychologist provides, that is, to align expectations with likely outcomes. Studies investigating the public's perception of psychological services have provided some insight into why people seek those services and perception of service effectiveness. Nowadays, psychological service delivery is aligned with changing community needs, rather than the broader schools of psychology. As a consequence, changes to the application of professional services have seen the development of sub-disciplines such as: organisational psychology, forensic psychology, clinical psychology, counselling psychology, and sport psychology (Morris & Summers, 1995; Murphy & Kovack, 1972; Murray, 1983).

This literature review will include key historical developments in the public's perceptions of applied psychological practice, discuss how those perceptions evolved, and review the factors that have shaped public perceptions of psychological practice in recent years. In addition, an extensive review including interpretations, evaluations, and attitudes of sport psychology from athletes, coaches, spectators, non-spectators, sport psychologists, and other professionals is provided.

Public Perceptions of Psychoanalytical Psychology

Psychological service delivery has origins dating back to the 19th Century with the establishment of psychiatry and initial attempts to treat the mentally ill. Psychiatry followed a neurological based medical model before the development of psychoanalysis, offering few remedies to a range of mental disorders (e.g., schizophrenia, major mood disorders), and often prescribed an array of ineffective treatments to patients (Ellenberger, 1970; Murray, 1983). Initially, there was minimal understanding regarding mental illness and the public frequently perceived practitioners as "quacks", and referred to those with a mental disorder seeking assistance as being "moonstruck" or a "lunatic" and regularly treated them as criminals (Brennan, 1994).

Psychiatry has significantly influenced the direction of psychology, both in the development of applied professional practice, and also in public attitudes and perceptions toward psychology. Early studies revealed that historically, the links between psychiatry and psychology resulted in the general public often being unable to distinguish between the two professions. As a result, public confusion has existed regarding the types of issues that psychologists and psychiatrists treat (Guest, 1948; Nunnally & Kittross, 1958). This may, at least in part, be founded on widespread use of Freud's (1856 - 1939) teachings in both psychiatry and psychology.

Freud, the founder of psychoanalytic theory had studied medicine before developing his model of psychoanalysis (Ellenberger, 1970; Murray, 1983). Psychoanalysis marked the commencement of understanding the personalities of patients, and it would later have a huge influence on the public acceptance of clinical psychology, by treating psychiatric patients with alternatives methods to medication (Ellenberger; Murphy & Kovack, 1972). For a long time, however, there was significant resistance from the medical fraternity regarding Freud's "talking cure", and claims that adult personalities developed from childhood experiences and that psychotic behaviour was driven by unconscious sexual motives and unresolved aggressive conflicts (Brennan, 1994; Ellenberger; Murray). Freud lived during the Victorian era marked by socially conservative behaviour and sexual repression, and public attitudes were opposed to his ideas of childhood development being distinguishable by satisfying changing sexual urges (e.g., oral stage, anal stage). When Freud expressed his psychoanalytic theory of personality and suggested that unconscious factors govern behaviour, he experienced significant public ridicule because it was disconcerting to people of that period to accept that they were not in total control of their mind (Ellenberger). Freud received public criticism from contemporaries suggesting that the development of psychoanalysis had no testable hypotheses or empirical basis (Brennan, 1994; Murray, 1983). The general public also continued to be sceptical of Freud's theories because they had trouble accepting the notion that behaviour was driven by repressed unconscious motives (Brennan; Ellenberger, 1970). Psychoanalysis, however, revolutionised thinking about personality and human motivation, becoming widely accepted by psychiatry, and later clinical psychology to treat a range of client neurotic disorders and emotional issues.

Public Perceptions of Clinical Psychology

In 1896 Witmer (1867-1956) coined the term "clinical psychology" to refer to his work in diagnosing and treating patients at the University of Pennsylvania (Murray, 1983). Despite the reference to applied psychological services at the end of the 19th Century, most of the work in psychology was research oriented with little interest in the application and perceptions of psychological services (Boring, 1957). The development of intelligence testing in the early 20th Century increased applied work as attempts were made to diagnose children with retardation, and to identify the intellectual abilities of soldiers enrolling in the armed forces (Hothersall, 1984). Clinical psychology achieved official status as a division of the American Psychological Association (APA) in 1918 (Murray). Following World War I, psychology experienced significant community popularity because of the publicity received regarding the trauma counselling provided to service personnel (Benjamin, 1986). During the 1920s, psychology's popularity soared and articles were published regularly, offering the public advice regarding mental wellbeing (Benjamin). Assistance in dealing with traumas in the aftermath of World War I, and the influence of psychoanalysis in the treatment of mental disorders, led to public acceptance and prominence of clinical psychology as a discipline (Benjamin; Hothersall; Murphy & Davidshofer, 1994; Murphy & Kovack, 1972). Thus, psychology was starting to gain a foothold as a legitimate science that could provide beneficial and practical outcomes.

Psychology, similar to many other professions, experienced a significant decline in employment opportunities during the 1930s Great Depression. The public image of psychology also deteriorated because psychologists were unable to provide solutions to the social problems bought about by the depression (Pallak & Kilburg, 1986). Negative perceptions towards psychology also existed because many psychologists were accused of

promising more than they could deliver (Benjamin, 1986). Following World War II, psychology experienced substantial growth once again in terms of employment opportunities and recognition for contributions made to the war effort. Public understanding of psychologists and psychological services, however, continued to come from sources such as the media (Benjamin). In 1945, the APA established a Central Office and a Committee on Public Relations to communicate issues and developments about psychology to the public, and to review the functions, income, and professional qualifications of psychologists (Pallak & Kilburg; Small & Gault, 1975). The APA was also eager to examine the main sources of influence that helped form public attitudes and ideas, and the type of professional help the public sought (Bram, 1997; Guest, 1948; Thumin & Zebelman, 1967). The professional concerns of the APA were the public's understanding of the distinction between psychology and psychiatry, what people knew about psychology, and public attitudes towards psychology (Benjamin; Pallak & Kilburg).

The APA's interest in the public image of psychology soon resulted in several studies investigating public perceptions towards psychologists and psychology. Early research revealed that there was considerable confusion in the public's understanding of psychology, and the distinction between psychology and psychiatry. Guest (1948) argued that for psychology to attain respect in the eyes of the general public, it was necessary to find out what attitudes existed in the community about psychologists, and what sources of information led to the formation of those attitudes. Guest found that information about the duties undertaken by psychologists often came from biased media sources such as movies and newspaper columns and it was these biased sources that frequently reinforced the negative attitudes of the public.

Guest (1948) conducted interviews with 311 community residents in New York, New Jersey, Illinois, and Pennsylvania. Participants answered twenty fixed-response

questions (i.e., agree, disagree, don't know, and no answer) to identify public understanding relating to: the professionals that participants would consult for a range of clinical and non-clinical psychological issues, where a psychologist could be located, the qualifications a psychologist must attain in order to practice, and the difference between psychologists and psychiatrists. Psychology was not a particularly popular profession; almost one third of participants in his study preferred that their offspring avoid pursuing a career in psychology and over one third believed psychologists were "queer". Many participants thought that, compared to other occupations, "psychologists are odd and unusual people" (38%), "psychologists are wrapped up in their own theories and are impractical" (52%), and "psychologists can read a person's mind" (26%). Just under half the respondents (40%) were unaware that formal qualifications were required before using the title "psychologist". Guest also found the community realised psychologists deal with intellectual and personal mental problems, but were generally unaware that psychologists also worked in business and industry. Participants were confused about the role of psychologists compared to psychiatrists and the services of other professions. For example, many respondents (61%) recognised that a psychologist would be the professional to seek for career advice, however, a number of participants believed that to complete an attitude survey, an economist (27%) would be the professional to seek rather than a psychologist (38%). These results indicated a limited public understanding of psychological services because some participants incorrectly aligned other professions with services that psychologists routinely provided. Despite numerous misconceptions about psychology a substantial proportion of participants believed that it was essential that psychology be taught in high schools (65%). Guest concluded that there was a need to increase public education of what psychologists do and what sources are available to locate a psychologist.

Researchers continued to investigate perceptions towards psychology. Nunnally and Kittross (1958) conducted cross sectional research with 207 participants who were representative of the United States population in terms of age, sex, marital status, income, and education to document public attitudes toward mental health professions. Participants completed a 7-point likert scale for 19 bi-polar descriptors of a range of perceptions or attitudes (e.g., worthless – valuable, ineffective – effective) toward each of the mental health professions and mental patients being reviewed in the research. Respondents were asked to rate each of the health services groups. Generally the mental health professions were viewed favourably, particularly on the evaluative scales such as worthless-valuable, undependable-dependable, and ineffective-effective. Cluster analysis of the 19 scales also identified an "understandability" cluster consisting of the scales unpredictable-predictable, complicated-simple, and twisted-straight. Compared to several of the professions, however, psychology was seen to be complicated, possibly indicating some confusion about what psychologists do. Public perceptions appeared more positive towards the physical tangible professions (e.g., doctor, nurse) when compared to the non-physical mental professions (e.g., psychology). Nunnally and Kittross suggested that maybe the public is more familiar with the physical medical professions than the mental health professions and therefore, respond more favourably to the former. Nunnally and Kittross reported that differences in the ratings of professions existed only when the morpheme "psych-" was part of the title. For example, a psychiatrist was rated less favourably than a doctor on all of the 19 bi-polar scales. When a psychologist was compared to a doctor the difference was even greater, showing the doctor again as more favourable. No clear distinctions were made between psychologists and psychiatrists.

Thumin and Zebelman (1967) also conducted a study of the public's perception of psychology and psychiatry. Thumin and Zebelman randomly selected and telephone

interviewed 400 St. Louis residents to investigate the understanding of what psychologists and psychiatrists do, the estimated average income of psychologists and psychiatrists, and the clinical circumstances that would require the services of a psychologist or a psychiatrist. When comparing psychology and psychiatry, participants identified psychology as associated with research and human behaviour, whereas psychiatry was more associated with medicine. Both psychology and psychiatry were professions that were credited by participants as helping people with their emotions, understanding their problems, and analysing personality differences. In terms of whom the public would contact for assistance, psychology was perceived as a profession that would assist with determining a child's IQ or providing marital counselling (Thumin & Zebelman). Clinical issues such as depression, mental illness, or excessive drinking were seen as problems that should be dealt with by a psychiatrist rather than a psychologist. Participants also indicated a preference to address some issues through alternative service providers other than psychologists or they were unaware of the range of services psychologists provide. For example, many participants showed that they would contact their ministers for marital counselling and Alcoholics Anonymous for drinking problems, as opposed to a psychologist (Thumin & Zebelman).

Despite almost 20 years elapsing between Guest (1948) and Thumin and Zebelman (1967) studies, public perception of a career in clinical psychology continued to be negative. When asked to indicate the profession of choice for a son to possibly pursue among psychologist, surgeon, engineer, lawyer, psychiatrist, or dentist, psychologist was the least preferred occupation. Thumin and Zebelman highlighted, that compared to Guest's findings, there was an improved degree of understanding in both what psychologists do and how they differ from psychiatry. Despite these results, Thumin and Zebelman concluded that although people were becoming increasingly more aware that

the two professions were separate entities, it was disconcerting that the profession of psychology continued to be an undesirable profession.

Strategies to Change the Public Image of Psychology

By the 1970s, in response to a number of public image studies, the APA began a comprehensive program to promote a positive public image of psychology. Pallak and Kilburg (1986) reviewed the role and strategy of the APA, and discussed the progress made in improving the public image of psychology. From the initial establishment of the APA in 1892, membership had grown to 60,000 by the early 1980s, and in excess of 155,000 psychologists are currently APA members 2003 (APA On-line, 2003; Benjamin, 1986). Pallak and Kilburg also indicated that without a structured approach to addressing the public image problem, the media portrayed psychology in "pop" and "faddish" terms. When it was becoming clear that psychology was lacking the public respect attributed to medical, physical, and biological sciences, a budget was devoted to dealing with community perceptions. In 1970, the APA *Monitor* began as a newspaper to inform APA members about forthcoming events and issues confronting the profession. The APA's strategy was to expand the original distribution of the *Monitor* to include the broader public to develop interest and respect for psychology by increasing awareness of the expertise of psychologists. Issues of the *Monitor* were distributed to government agency staff, congressional staff, numerous professional health and welfare associations, and to general public libraries (Pallak & Kilburg).

Despite the APA's efforts to expand the *Monitor* and have more control over the public promotion of psychology, numerous media articles continued to critique and frequently criticise psychology. Lofton (1972) undertook a review of related published studies to understand why negative perceptions existed towards psychology and psychologists and what steps were being made to change public views. Lofton found that

the public generally felt an excessive amount of psychological testing had been used in private and public employment sectors and in educational settings. Lofton also suggested that because of this perceived overuse of personality and intellectual testing, people believed psychologists had the potential to have too much influence over personal career plans and long-term futures.

In 1974, a Public Information office was established, and later, in 1978 a Public Information Committee was formed to provide periodic press releases about psychology's goals, psychological topics of interest, and to promote the APA's annual convention. To increase public appreciation for psychology, the APA and the American Psychological Foundation (APF) also developed a program of annual print media awards to recognise and reward quality public material regarding psychology (Pallak & Kilburg, 1986; Wood et al., 1986). A significant hindrance to the ongoing marketing and awareness drive by the APA was the Reagan government's decision to make significant federal budget cuts for research and training of the behavioural and social sciences early in the 1980s, preferring to provide more support for the natural sciences. To raise awareness of psychology within federal government, several associations in conjunction with the APA, provided information to key audiences regarding the importance of psychology and the issues the profession faced (Pallak & Kilburg). Key organisations that took part in this political agitation included: (a) The Council of Graduate Chairs of Departments of Psychology (COGDOP), (b) the Federation of Behavioural, Psychological, and Cognitive Science Societies, (c) the Consortium of Social Science Associations, (d) the Association for the Advancement of Psychology (AAP), and (e) the American Association for the Advancement of Science (AAAS). Specifically, representatives from COGDOP made concerted efforts to meet with congressional delegations and staff to broadly discuss matters of research, services, training, and applications of psychology. Senior

psychologists from the federation also presented psychological research to educate Congress on key topics of interest in psychology to inform public policy makers. Through the efforts of the APA, the public has become more informed about the role of psychologists. Psychology has also become a part of the high school curricula in the past 20 years, leading to further exposure to the general public (Benjamin, 1986; Lofton, 1972; Murphy & Kovack, 1972; Pallak & Kilburg, 1986; Webb & Speer, 1986).

Public Perceptions of Contemporary Psychology

As previously discussed, early studies confirmed the concerns the American Psychological Association (APA) had about its public image such as people being misinformed about what psychologists do, psychology being an undesirable profession to pursue, confusion existing between the professions of psychology and psychiatry (Nunnally & Kittross, 1958; Thumin & Zebelman, 1967). Webb and Speer (1986) suggested these early studies, however, did not address the question of what specific factors contributed to the public's lack of knowledge of psychology and psychologists. Webb and Speer also indicated that inadequate research methodology might have contributed to the negative psychology public opinion data. For example, rating psychology lowest in the public's professional hierarchy, did not necessarily suggest a negative image of psychology, only inferior status in comparison to those professions selected. Webb and Speer investigated the perceptions of 174 undergraduate (non-psychology majors) and their parents towards psychologists, psychiatrists, physicians, counsellors, teachers, and scientists. Participants were given a list of descriptors and asked to complete Likert-scales that rated each descriptor against a profession (e.g., 0 = almost no members of this profession fit this description to 6 = almost all members of this profession fit this description), along with a favourability Likert-scale (e.g., 1 = unfavourable to 6 = favourable) for each of the professions. Overall, psychologists were

rated favourably, and compared to the other five professions, psychology rated above the group means for the descriptors of patient, understanding, psychological, rich, helpful, and inquisitive. In some areas, however, psychologists rated relatively low, indicating a perception that psychologists were somewhat alienated, arrogant, and unappreciated by the undergraduates (Webb & Speer).

Two-dimensional non-metric scaling was calculated to reveal two dimensions of "tough-mindedness" versus "tender-mindedness" and "deals with normality" versus "deals with abnormality." Webb and Speer (1986) suggested that confusion about the role of psychologists and psychiatrists still remained given that both professions were perceived as containing tender-minded individuals who deal with abnormal phenomena. Perhaps, this indicates a lack of understanding about the broader services that psychologists provided. The perceptions of a psychologist were also opposite to the stereotypical view of a scientist, who was seen as tough-minded and dealing with normal phenomena. Webb and Speer explained that the ratings of the professions in order from most favourable to least favourable were psychiatrist, psychologist, physician, counsellor, teacher, and scientist. Webb and Speer thus recommended that further education was still required to inform the public about what psychologists do.

More recent studies have been designed to identify specifically what the public perceives that psychologists do during consultations and attitudes towards the services of psychologists. Furnham and Wardley (1990) studied the perceptions of 200 participants to determine what respondents believed psychotherapy clients experience during consultation, along with their attitudes towards psychotherapy. Also reviewed was the influence of, gender, age, education, and psychological experience (i.e., understanding what psychological services are and the difference between psychotherapeutic specialists) had on public attitudes towards psychological services. Two questionnaires regarding

reactions to psychotherapy (20-items) and attitudes toward, and beliefs about psychotherapy (40-items), were completed. Factor analysis of the two questionnaires revealed six factors in the first questionnaire; negative reactions, understanding of therapy, confident improvements, active change, therapist relationship, and client insight. The second questionnaire had eight factors; teach clients, therapy sessions, conflicts and emotions, limited benefits of therapy, duration of therapy, instructions of therapist, progress in therapy, and untrue details of therapy. Furnham and Wardley suggested that participants were generally very positive towards psychotherapy, rating statements about clients feeling hopeful, confident, and supported as more true than statements of clients feeling rejected, confused, and misunderstood. Furnham and Wardley also reported that older participants were more likely than younger participants to believe that clients experience negative reactions in psychotherapy and that clients have a complex relationship with their psychotherapists. Participants with previous experience or knowledge about psychotherapy indicated an understanding of what outcomes to expect, and were realistic about the actual benefits and progress made during psychotherapy. People with minimal service delivery exposure may have higher expectations towards the outcomes of psychotherapy prior to commencing consultation with a psychologist. Furnham and Wardley indicated that the existence of negative attitudes towards psychological service delivery might be attributable to the presence of unrealistic expectations regarding psychotherapy before seeing a psychologist. Furnham and Wardley recommended that before commencing service delivery, the psychologist needs to explain the rationale and strategies involved in therapy so as to ensure the client knows what to expect. The perceptions of psychology were generally positive, but similar to previous studies (e.g., Thumin & Zebelman, 1967, Webb & Speer, 1986), when

participants were uninformed about the content of psychological consultation, psychological services were likely to be perceived negatively.

In recent years, researchers have used more comprehensive and specific tests to measure perceptions of psychological services. Wong (1994) replicated and extended the research of Furnham and Wardley (1990) relating to previous experience and knowledge of psychotherapy. Undergraduate psychology students and non-academic support staff completed questions regarding previous psychological services experience including: the Reactions to Psychotherapy Questionnaire, the Attitudes Toward and Beliefs About Psychotherapy Questionnaire, and the Therapist Credibility (TC) scale. Wong's study also extended previous research by assessing participants' perceptions of therapist credibility in relation to fees charged and treatment modality (e.g., psychotherapy strategies and interventions). Participants' perceptions were generally positive believing that therapists encouraging clients to express emotion and develop skills to reduce frustration are good outcomes from psychotherapy, and female participants had more positive perceptions of psychotherapy than did male participants (Wong).

Despite increased public education of psychology, misconceptions have remained regarding psychological services. Wong reported some common misconceptions and lack of understanding by participants (e.g., most therapists ask about dreams, and are unclear about the length of therapy). Even in 1994, it appeared that the perennial problem of differentiating between mental health service providers remained unclear. Wong found only half the respondents could make the distinction between a psychologist, a psychiatrist, or a psychoanalyst. Wong also found that neither gender of the therapist or fees charged affected perceptions of therapist credibility. The treatment modality, did however, influence the credibility of the therapist. Therapy that was rated as most effective (e.g., confronting and challenging the client's issues to achieve outcomes) was

also seen as the least "comfortable." Wong concluded that this result might indicate that a therapist's effectiveness stems from their ability to induce behavioural discomfort to muster behaviour change. Wong also suggested, therefore, that methods of psychological intervention may be another source of negative perceptions of psychological services because making a positive change may involve an uncomfortable behavioural intervention (e.g., confronting someone with an unresolved issue). Wong also stated that it is essential to clarify expectations and outcomes of the therapy with the client to ensure satisfaction upon completion of the service being delivered.

Public Perceptions of Psychology in Australia

Following efforts of the APA post World War II to establish the Central Office and Committee on Public Relations, numerous studies have emerged in North America. Conversely, there has been virtually no studies examining perceptions of psychology in Australia. The exception being research conducted during the 1970s (Small & Gault, 1975; Wilkinson et al., 1978). Small and Gault suggested the public perceptions of psychology in Australia maybe similar to those that existed in the United States in the 1940s and 1950s. The main concerns in Australia at this time were also the inability of the public to differentiate between the work of psychologists and psychiatrists (Small & Gault; Wilkinson et al.).

Small and Gault (1975) conducted eight minute interviews with 360 participants in a Sydney metropolitan shopping regarding the perceptions of the role of psychiatrists and psychologists including: what psychologists do, and whether psychology was a desirable career. Participants were interviewed and grouped according to socio-economic class (i.e., low, middle, and high), age (i.e., 20-35, 36-50, and 50 plus years), and gender (i.e., males and females). Small and Gault found that these Australian participants could differentiate between psychologists and psychiatrists, but only when job responsibilities were

presented and a choice was required regarding which profession completed various functions. When comparing the group perceptions, the high socio-economic group and younger age groups (i.e., 20-35 and 36–50) were more informed about the psychologists' role. The sample was also asked to rate their most desirable career comparing ten professions (i.e., accountant, architect, chemist, clergyman, dentist, doctor, psychiatrist, psychologist, school teacher, and social worker). Only 1.42% of participants listed psychology as their most desirable profession, ranking last when compared to the other career options. Small and Gault suggested that these results clearly indicated a lack of information about what psychologists do, and that the negative attitudes may be attributable to a stigma towards mental health professions. Anecdotal feedback from the interviews highlighted that a number of participants appeared eager to make it known that they had never consulted a psychologist as doing so may indicate the person is not "normal." In fact, some participant responses revealed that it was socially desirable not to know about the role of a psychologist.

Wilkinson et al., (1978) also investigated perceptions of psychology in Australia with a sample of 126 Brisbane residents. Participants were grouped according to five socioeconomic levels (i.e., 1, 2, 3, 4, and 5) and age (i.e., 0–35, 36–50, and 50 plus). The participants were asked to answer a five-item questionnaire regarding public knowledge of and attitudes towards the helping professions (i.e., medical doctor, social worker, clergy, psychiatrist, and psychologist). The questionnaire included items such as the role of each profession, attitudes towards each profession, and levels of confidence in each profession. Psychologists were perceived to be least consulted, least known, least useful, and levels of confidence towards psychology ranked fourth in the group of five professions reviewed. No significant differences in perceptions were found between the independent variables of socioeconomic status and age. Wilkinson et al. suggested,

similar to previous research (Guest, 1948; Nunnally & Kittross, 1958; Small & Gault, 1975), that knowledge of psychology generally came from less reliable sources such as television media, magazines, newspaper articles, and movies. Lack of knowledge about many of the health professions has also been a source of confusion about psychological services, leading to negative perceptions towards (Thumin & Zebelman, 1967; Wilkinson et al.). The result in Australia, as in North America, has been misconceptions of psychology and even denigration of the role of psychologists (Wilkinson et al.). Wilkinson et al. recommended that education programs needed to be developed within Australia that informed other professionals and the general public about what psychologists do, and the usefulness in accessing such services. It would be interesting to know whether the intervening 28 years have changed these public responses of psychology.

Historical Developments of Sport Psychology

North American sport psychology pioneers began researching how psychological factors apply to sport and recreational settings in the late 19th century (Fitz, 1897; Triplett, 1898). There was little interest, however, in identifying the public's degree of understanding of what sport psychologists do, or the public perception of service delivery (Davis et al.). For example, Triplett conducted several studies that targeted the effects of social facilitation on cycling performance. Triplett concluded in his paper, "The Dynamogenic Factors in Pacemaking and Competition," that the performance of a cyclist in the presence of a pacemaker was superior compared to a person cycling alone (Davis et al.; Silva & Weinberg, 1984). Notable advancements in North American sport psychology began in the 1920s with research and applied work that was focused on improving the performance of coaches and athletes (Griffith, 1926, 1928). Griffith, often referred to as the "Father of American Sport Psychology," devoted a significant proportion of his career

to research applying psychological principles to sport. He published his work in numerous books and journals (Gould & Pick, 1995). Despite Griffith's success, Kroll and Lewis (1970, page 2) described him as a "Prophet without disciples" because none of his students went on to pursue careers in sport psychology. In 1938, Griffith was appointed as the psychologist for the Chicago Cubs; he was hired to assess and improve the performance of the players throughout the season (Gould & Pick; Silva & Weinberg). Griffith was attempting to improve player performances by evaluating and providing feedback of skill development, personality styles and leadership to players. The attitudes of coaches and athletes towards this psychological assistance and the implications of using these services were not empirically assessed. When Griffith completed his services for the Chicago Cubs at the end of the 1938 season, it also marked the end of applied sport psychology service delivery until the 1950s (Gould & Pick).

Interest in sport psychology grew from 1950 onward with the publication of numerous research articles and book chapters about sub-topics such as imagery thought to affect sport performance (Ammons, 1951) and stress (Howell, 1953; Ulrich & Burke, 1957). Key publications in sport performance, for example, included *Psychology of Coaching* (Lawther, 1951), *Science and Medicine of Exercise and Sports* (Johnson, 1960), *Movement Behaviour and Motor Learning* (Cratty, 1964), *Psychology and Physical Activity* (Cratty, 1967), and *Motor Learning and Human Performance* (Singer, 1968). In these early years of sport psychology, the two sub-disciplines of applied sport psychology and motor learning were closely connected (Silva & Weinberg, 1984). A publication that attracted considerable interest and controversy was *Problem Athletes and How to Handle Them* (Ogilvie & Tutko, 1966). There were ethical concerns that the book mainly aided the coach to control athletes to achieve performance results rather than facilitate the

overall development and best interests of athletes and was perceived by some sport psychologists to undermine effective service delivery (Landers, 1995; Williams, 1998).

Applied sport psychology in North America was mainly led by academics working in physical education and motor learning. These professionals founded several sport psychology societies, organisations, and research journals to enable communication of current knowledge about the field from completed research (Landers, 1995; McCullagh, 1995; Williams, 1998). Relative to other psychological services, however, the practice of applied sport psychology during the 1950s and 1960s was minimal, and public perceptions of sport psychology services were not a consideration. Societies formed during this period included: the International Society of Sport Psychology (ISSP; 1965), North American Society for the Psychology of Sport and Physical Activity (NASPSPA; 1967), and the Canadian Society for Psychomotor Learning and Sport Psychology (CSPLSP; 1969). A critical development for applied sport psychology was the development of the Association for the Advancement of Applied Sport Psychology (AAASP) in 1985. By 1997 there were in excess of 900 professional and student members, and by 2002 there were more than 1,400 members (AAASP On-line, 2003; Krane, 1997). The objectives of AAASP include addressing applied aspects of sport psychology such as promoting appropriate research, ethical issues regarding psychological interventions, and promotion of sport psychology services to the public and other psychology disciplines (Greenspan & Feltz, 1989; Silva, 1987; Williams, 1998). When the American Psychological Association (APA; 1892) officially established sport and exercise psychology as one of its divisions (Division 47) in 1986, it further signified sport psychology as a discipline that was devoted to research and the application of sport psychological services. Research journals that have been founded and devoted to the field include the *International Journal of Sport Psychology* (1970), later renamed as

International Journal of Sport and Exercise Psychology (2003), *Journal of Sport Behaviour* (1978), the *Journal of Sport Psychology* (1979), later renamed as *Journal of Sport and Exercise Psychology* (1988), *The Sport Psychologist* (1987), *Journal of Applied Sport Psychology* (1989), and *Psychology of Sport and Exercise* (2000). Professional journals have been established to peer review current studies and publish research relevant to the field including contemporary research focusing on the perceptions of sport psychology services. Professional associations have also been established to maintain a standard of service delivery that encourages a positive perception amongst the public of sport psychology services (Landers).

Applied sport psychology has also had a long history in the former Soviet Union and Eastern European countries, but with different intentions for research and application of theoretical models. Physician P.F. Lesgaft who referred to the psychological benefits of physical activity showed interest in sport psychology as early as 1901 in the Soviet Union (Vanek & Cratty, 1970). Moscow and Leningrad Institutes for Physical Culture were later established in 1920s, and interestingly, early research during the 1950s centred on controlling psychophysiological processes to assist cosmonauts travelling in space (Williams, 1998). Many of these techniques later filtered through to sport science programs in the Soviet Union and Eastern Europe in 1970s with the development of education and sport science institutions (Silva & Weinberg, 1984). The historical developments of sport psychology in these eastern bloc countries were similar to those in North America, however, the intent and content of sport psychology research differed between eastern and western countries. Success in sport was seen in Eastern Europe as a powerful propaganda tool for enhancing a country's political profile. Salmela (1984) suggested that government controls stipulated that all research completed was coordinated and streamlined to assist the state achieve its research objectives. A government-

controlled approach to sport performance resulted in many psychologists entering the field from a range of background interests because there were many opportunities to assist national teams achieve international success. In comparison, many North American sport psychologists have pursued the discipline because they have competed in sport themselves at some point during their career (Salmela). As sport psychology flourished in the eastern bloc countries in the 1970s and 1980s, the focus of research also differed compared to North America. Eastern European sport psychologists conducted research that frequently aligned with government objectives and resulted in approximately 55% of research centred on elite athletes and performance. Only 28% of studies were devoted to the non-athletic population and developing broader knowledge (Singer, Murphey, & Tennant, 1993). By comparison, North American research, which has been academically based, devoted approximately 53% of research towards non-athlete populations, and 39% studying elite athlete populations (Singer et al., 1993). The 1990s have seen significant changes to the political landscape of many Eastern European countries and this has resulted in less state-coordinated research. Less government support to achieve excellence in sport has also likely reduced opportunities to grow and develop sport psychology in these countries (Singer et al.; Silva & Weinberg; Williams).

Establishment of Sport Psychology in Australia

Similar to the origins of sport psychology in North America, Australian practitioners perceived the profession somewhere between psychology and physical education (Abernethy et al., 1992). Australia's system of developing elite athletes through a community club system is quite different to the North American model where the NCAA college system of competition predominates. Early Australian interest in sport psychology performance research was limited, and dates back to the late 1960's (e.g., Kirkby, 1968). Through the 1980's, sport psychology research articles continued to grow

in number but university lecturing positions remained limited, and of the few initial university placements, most were part of physical education rather than psychology departments (Kirkby, 1995). This meant the majority of curriculums offered in sport psychology consisted of single subjects relating to sport psychology within an undergraduate program (e.g. physical education) rather than a continuous or holistic sport psychology course of study. Morris (1995) indicated that the universities that were employing sport psychologists during this period included the University of Western Australia, Phillip Institute, Victoria College, Footscray Institute of Technology, the South Australian Institute of Technology, and Canberra CAE.

Following the 1976 Montreal Olympics where Australia failed to win a gold medal, a number of developments also occurred in better preparing athletes for national and international competition. The Australian Institute of Sport (AIS; 1982), the South Australian Sports Institute (SASI; 1983), and several satellite centres in the major Australian capital cities, were founded to provide support services for individuals and squads competing at a state, national, and international level. When sport psychology services to athletes increased as a consequence of working within the institutes, practicing sport psychologists were employed primarily to improve the quality of service delivery to elite performers at national and international level (Morris, 1995).

These early beginnings of applied sport psychology services provided within institutions would later be the stimulus for establishing the College of Sport Psychologists (CoSP) with the specific intention of promoting the ethical standards and delivery of sport psychology services. The founding of CoSP, though, was the culmination of three independent interest groups that had already formed during this period to promote sport psychology. The societies were the Australian Applied Sport Psychology Association (AASPA), the Sport Psychology Association of Australia and New Zealand (SPAANZ),

and the Australian Psychological Society Sport Psychology Interest Network (AUSPIN) (Morris, 1995). Representatives from the three societies (i.e., AASPA, AUSPIN, and SPAANZ) attended the 1990 APS Annual Conference to discuss the options available for forming a single steering group that would represent the interests of sport psychology in Australia. Each of the society representatives agreed that when the new association was formed, they would dissolve their previous groups and the steering committee would apply for professional College status within the APS. A proposal was compiled that made reference to specific sport psychology texts and journals, existing knowledge about the field of sport psychology, and the experiences of current practitioners who were working in the sport institutes and academic settings at that time. The proposal was approved by the APS Committee of the Division of Professional Affairs in May 1991, and the inaugural meeting of the College of Sport Psychologists was held later that year in November 1991 in Melbourne (Kirkby, 1995; Morris). The specific purpose was to promote the profession of sport psychology in Australia by providing guidelines for appropriate qualifications needed to enter the field and potential career opportunities. The CoSP also monitors ongoing ethical issues and public perceptions of service delivery that may arise with psychological interventions provided to sport and exercise clients (Morris; Morris & Summers, 1995).

Public Perceptions of Sport Psychology Services

Sport psychology as a field has made considerable steps forward and has achieved significant professional recognition through the establishment of industry organisations and research journals. There has also been a wealth of studies that have demonstrated the effectiveness of psychological interventions to improve performance in athletic performance and for recovery from injury (e.g., Burton, 1989; Epstein, 1980; Greenspan & Feltz, 1989; Thomas & Over, 1994; Vealey, 1988, 1994). There is evidence, however,

that athletes using sport psychology services may be perceived negatively, and therefore sport psychology may not be fully embraced by the sport population. For example, the number of people making a substantial part of their living from sport psychology service delivery is low (Aldridge et al., 1997; Andersen et al., 1997). Psychologists themselves have also commented that they would not encourage athletes to make it known to the public that they had been working with a psychologist, which itself raises issues about peoples' attitudes towards psychological consultation (Linder et al., 1989; Ogilvie, 1977).

A number of sport psychology researchers have examined issues of service delivery and the perceptions held by coaches, athletes, and the public towards the use of sport psychology services (Martin et al., 1997; Schell et al., 1984; Silva, 1984; Van Raalte et al., 1990, 1992). Some researchers investigating perceptions of attitudes towards sport psychologists have used indirect measures like participants rating hypothetical situations (Linder et al., 1989; 1991; Van Raalte et al.). For example, Linder et al. (1989) completed two experiments to investigate public perceptions of a hypothetical situation depending on whom an athlete consulted for a "performance consistency" problem. In the first study, Linder et al. used introductory psychology students to rate the "draft suitability" of a "centrally important" American football player (i.e., quarterback) according to whether the player had consulted a sport psychologist, or a coach for their consistency problem. Respondents were also asked to complete 10 bi-polar 7-point likert scales (e.g., would fit in well with management, would be a team player, would be emotionally stable) to identify what attributes participants perceived the athlete to have based on their draft ratings in relation to whom the athlete had consulted. The findings showed that draft suitability ratings differed depending on whether the player consulted a sport psychologist or a coach, with lower ratings for players who had consulted a sport psychologist despite the fact that participants were psychology majors (Linder et al.). Participants also

perceived the attributes of players who consulted a sport psychologist as less emotionally stable and less likely to fit well with management compared to players who had consulted a coach (Linder et al.). Linder et al. suggested that because of the perceived aggressive, masculine nature of American football, a player who consults a sport psychologist would be violating what the public expects of a football player. Given that the rating of the hypothetical player being drafted was a quarterback (i.e., a key player in American football), there might have been greater expectations for stereotypical behaviour and fewer leniencies for deviation (i.e., participants expected a quarterback would consult the coach for consistency problems). Linder et al. showed in the first study there was evidence of stigmatisation towards a player that deviates from expected behaviour. The results, however, did not demonstrate whether negative perceptions existed for players in different positions within a team that consulted a sport psychologist in preference to their coach. The second study, therefore, looked at whether the draft suitability rating of a "centrally important" player to the team (i.e., guard in basketball) versus a "peripherally important" player (i.e., centre) would differ depending on whether or not the player had used sport psychology services. Linder et al. found that both "centrally important" and "peripherally important" players were considered to relate less well with other players in the team and have more difficulty fitting in with management, if they had consulted a sport psychologist rather than a coach. Linder et al.'s results were consistent with the perceived social deviance theory of stigma because all players that behaved outside of public expectations (i.e., consulted the sport psychologist rather than the coach) were stigmatised, as opposed to specific groups being stigmatised (i.e., central versus peripheral position players). Despite efforts made by the authors not to bias responses of participants (e.g., "Quarterback sees clinical psychologist for treatment of uncontrollable anxiety"), generalising the description of the athlete's issues (i.e., assistance for a

"performance consistency" problem) may have invalidated the results. The phrase "performance consistency" may have been interpreted in a number of ways by participants (e.g., physical, mental, skill), therefore, responses may not necessarily be representative of perceptions of an athlete consulting a sport psychologist for a psychological performance issue.

To understand negative public perceptions in greater detail, Van Raalte et al. (1990) asked participants to complete a questionnaire to determine the level of perceived professional similarity between a range of practitioners including sport psychologists, clinical psychologist, psychotherapists, coaches, psychiatrists, performance consultants, and other sports medicine specialists. As might be expected, the general public perceived sport psychologists as being more similar to clinical psychologists and psychotherapists than to coaches and other sport performance specialists, aligning the profession with mental health rather than sport (Van Raalte et al.). Van Raalte et al. suggested that this perception might be in contrast to sport psychologists' perceptions of themselves. That is, sport psychologists perceiving the profession to be traditionally sport related, especially since many sport psychologists developed from physical education and human movement backgrounds. Van Raalte et al. concluded that public perception appears to be linked to the term "psychologist" when interpreting the role of a sport psychologist. Linder et al., (1991) replicated and extended these earlier studies (i.e., Linder et al., 1989; Van Raalte et al.) using male and female undergraduate students and male Lions Club members. Their research revealed males judged athletes who consulted sport psychologists or psychotherapists rather than a coach more harshly than females. Linder et al. (1991), similar to Van Raalte et al., also revealed that sport psychology is more likely to be perceived as a mental health related occupation rather than a sport performance discipline. The social deviance theory of expected behaviour, therefore, may account for the public's

negative rating of players who see a sport psychologist, because of the likely perception that they are seeking help from a mental health practitioner who is outside of the sporting context (Archer, 1985; Linder et al.; Van Raalte et al.).

Athlete and Coach Perceptions of Sport Psychology Services

Athletes and coaches are the main consumers of sport psychology services. In addition to general public perceptions of athletes using psychological services, the perceptions of athletes and coaches regarding sport psychologists and of fellow athletes who consult sport psychologists are also important in understanding how the profession is regarded. Schell et al. (1984) conducted a study to assess the attitudes of Canadian sport personnel toward sport psychology services by analysing a number of variables including: gender, experience of using sport psychology, and confidence in sport psychology services in an attempt to predict market development opportunities and confidence in using sport psychology services in the future. The perceptions of 607 participants, including coaches, athletes, administrators, and officials, were measured in an attempt to determine the perceptions of sport psychologists. The findings indicated that initial consultation with a sport psychologist, would result in increased client confidence levels in the use of the services and clients becoming advocates of the profession to others. Schell et al. argued that the main predictor of confidence in sport psychology services was whether athletes had seen a psychologist previously, suggesting, that once athletes accessed the services, the potential for future growth of service delivery would be substantially increased. Once a client has worked with a sport psychologist, clarification of the services, how they can assist, and likely outcomes achieved from the consultation are better understood. Clients are then likely to make an informed decision about the benefits of sport psychology services and whether they need to continue seeing a sport psychologist.

Coaches represent leadership within a team, therefore, services they support and advocate are more likely to be used by the athletes they coach. To research coaches' perceptions of sport psychology services, Schell et al. (1984) also conducted an analysis of coaches to determine the level of sporting success they attributed to psychological skills. Coaches believed that 61% of successful performance could be credited to mental preparation, indicating the importance of psychological factors. Many coaches also felt they could fulfil this role themselves, but did add that a sport psychologist would be more skilled at observing and assisting with less obvious psychological factors (Schell et al.). Silva (1984) also surveyed male and female high school and college coaches to identify how sport psychology services could be integrated into sport programs. A high percentage of the participants surveyed indicated that they would find benefit from a sport psychologist, specifically, seminars and individual consulting with coaches and athletes were perceived as being of most assistance to a sports program. The results indicated that more than 90% of coaches believed that sport psychology could be useful to them and their athletes, and 68% suggested they would want a sport psychologist to work with their team (Silva). Regardless of their confidence in the usefulness of mental skills training, however, 65% of coaches also revealed that they would not be willing to pay for the services. Although mental preparation for performance was considered important, coaches believed they could assist in this area rather than employing a sport psychologist (Ravizza, 1988; Schell et al.; Silva). Many factors contributing to an athlete's performance require funded professional services (e.g., medical support, fitness and conditioning), thus, many coaches will attempt to minimise costs, especially if they believe they can use their own skill set. This highlights the importance of a sport psychologist providing professional service delivery to demonstrate a level of competence beyond any psychological skill set coaching staff possess. Silva also indicated that, of

those surveyed, only 8% believed that sport psychologists should be trained as a psychologist rather than attaining a physical education qualification. That is to say coaches believed that sport psychologists should have had an education that emphasised sport so they could relate to the challenges faced by athletes (Silva). A key element of service delivery is establishing rapport between the sport psychologist and the client, which assists in developing trust. A dependable client-practitioner relationship encourages the athlete to implement the interventions advised by the sport psychologist. A sport psychologist with non-specific sport experience is likely to understand the stresses an athlete confronts more compared to a psychologist with no sport industry experience. Demonstrating an appreciation for the client's environment is likely to contribute significantly to building the trusting professional relationship required to enable effective service delivery.

North American researchers have identified specific barriers relating to confidence of athletes working with sport psychologists (Ravizza, 1988; Yambor & Connelly, 1991). In a study of professional, Olympic, and intercollegiate athletes, Ravizza found that the main barriers preventing a sport psychologist working extensively with athletes were the "sport psychology-shrink" image, a lack of sport specific knowledge, and an inadequate understanding by the sport psychologist of the politics of the sport where the sport psychologist was working. Ravizza further suggested that limited awareness and appreciation of gender difference issues between the sport psychologist and the athlete might inhibit continuous delivery of service. In addition to performance related issues, sport psychology services may also cover personal non-performance matters. Discussing psychological skills with a sport psychologist to assist sport performance, therefore, may require addressing personal non-performance issues. With the pressure to perform, athletes may not want to reveal a lack of personal skills that may be perceived as

inadequate for optimal performance (Ravizza, 1988). Coaches are also aware of the importance of the mental aspects of the game, but previously they have been cautious of sport psychologists. According to Ravizza, coaches believe that they could assist athletes mentally prepare for a performance. In the last decade, sport psychologists have also significantly increased the numbers of teams they work with, leading to acceptance and clearer understanding of their role nowadays with coaches and athletes. Sport psychologists have not only become a useful resource for athletes to achieve optimal performance, but also for coaches to identify effective methods of assisting athletes to consistently achieve their best performance.

The issues of gender and cultural background differences between the sport psychologist and client have been discussed in relation to perceptions of psychological service delivery. Research using practicing sport psychologists has identified that several variables may contribute to athletes' negative perceptions of sport psychology services that are likely to inhibit the probability of athletes seeking consultations. Yambor and Connelly (1991) argued that female sport psychologists may be perceived as lacking "automatic credibility" in their knowledge of sport because sport is perceived as a male preserve, and may result in male athletes not consulting female sport psychologists. Yambor and Connelly concluded, however, that despite their experiences of athletes doubting the expertise of a female sport psychologist, male athletes have frequently indicated that the gender of the psychologist is not important, but the quality of the services are important. Yambor and Connelly also suggested that males involved in sport are more likely to be influenced by the competitiveness of winning, maintaining a "macho image," and not revealing vulnerabilities. Thus, Yambor and Connelly believed males are more resistant, and do not want to be perceived as "weak" or in need of seeking sport psychology services. Henschen (1991) also provided an account of his consultation

experiences with female athletes and suggested that because of sport cultural norms favouring a masculine orientation, male sport psychologists are likely to be perceived positively when consulting with female athletes. Henschen concluded by stating that the credibility of the sport psychologist would be quickly undermined if the practitioner's was lacking in knowledge of the sport they were consulting. Practicing sport psychologists have stressed the importance of understanding the rules and processes, the psychological demands, and "talking the language" of the sport the athlete is participating in (Henschen; Ravizza, 1988; Yambor & Connelly). The personal accounts of Ravizza, Henschen, and Yambor and Connelly provided a positive insight into how athletes' perceive their services, but the generalisability of their accounts may be somewhat limited.

Athletes are the main recipients of sport psychology services, therefore in addition to practitioner personal accounts of service delivery, knowing athletes' perceptions of other athletes seeing a sport psychologist is also essential to understand perceptions of sport psychology services. Van Raalte et al. (1992) asked participants from two American universities, one group having access to athletic counselling/sport psychology services, and the other without, to indicate how strongly they would recommend drafting a quarterback who had either worked with a coach, a sport psychologist, or a psychotherapist to improve performance. Unlike the results of previous research that studied the attitudes of the general public (Linder et al., 1989, 1991; Van Raalte et al., 1990), Van Raalte et al. found that athletes who had consulted a sport psychologist were not given a lower draft rating and perceived more negatively than athletes who had worked with a coach. Van Raalte et al. also showed, however, that although a sport psychologist was considered an expert in sport, a psychotherapist was perceived as a "mental expert" but not affiliated with sport performance. Van Raalte et al. suggested that although sport psychology was perceived as a positive resource, an athlete consulting a

psychotherapist, who is seen as an expert in mental issues, may be viewed as "deviating" from socially acceptable behaviour and may be stigmatised as a "mental patient" for doing so. Furthermore, Van Raalte et al. (1992) showed that athletes' ratings of other athletes were not affected by personal experience with a sport psychologist. Athletes who had engaged previously in psychological consultation did not perceive other athletes who consulted a sport psychologist negatively, and neither did the athletes who had not had exposure to sport psychology services (Van Raalte et al.). In summary, athletes both with and without sport psychology experience indicated they perceive services to other athletes that assist with performance and are delivered by an expert in the field (i.e., trained sport psychologist), as an important resource. An athlete that consults a "mental expert" who does not work specifically in sport (e.g., psychotherapist), however, is likely to be stigmatised by other athletes and the general public as having psychological problems. Athletes, therefore, are likely to be supportive rather than stigmatise other athletes that seek psychological consultation when they perceive that the services will improve sport performance.

Measurement of Perceptions of Psychological Services

Several sport psychology studies have used indirect measures in assessing attitudes towards seeking sport psychology services. Pencil and paper tests have also been developed to measure perceptions of psychology services, and more specifically, sport psychology services (Fischer & Turner, 1970; Fischer & Cohen, 1972; Harmison, 1999; Martin et al., 1997; Wrisberg & Martin, 1994). Fischer and Turner attempted to measure perceptions that existed towards psychological services. The Attitudes Toward Seeking Professional Psychological Help Scale (ATSPPHS) was developed to measure public attitudes towards psychological services. Initially, the ATSPPHS was administered to nursing and college students to assess reliability and validity. Factor analysis revealed

four measurable and definable factors: (a) recognition of personal need, (b) tolerance to stigma associated with psychiatric help, (c) interpersonal openness regarding one's problems and (d) confidence in the mental health professional. The ATSPPHS was then administered again on two separate occasions to female and male high school and college students. The same four factors were revealed and test-retest reliability of .89 and .84 respectively were reported with an overall internal consistency for the ATSPPHS of .83. Gender comparisons in the follow-up studies consistently indicated that when comparing male attitudes towards seeking psychological assistance to female attitudes, males were less inclined to seek help than females (Fischer & Turner). Participants completed at least one interpersonal-style questionnaire e.g., Rotter's (1967) Scale of Interpersonal Trust to identify behavioural characteristics that may correlate with existing perceptions towards seeking psychological assistance. When participants were characteristically "authoritarian," such as having rigid beliefs or conventional thinking, they would perceive psychology negatively. Conversely, participants who had a "trusting interpersonal style," (e.g., agreeable, open to discussion) were more inclined to seek psychological help (Fischer & Turner). Fischer and Turner also suggested the reliability of the four factor structure reinforces the ATSPPHS as an effective tool to measure causes of negative attitudes and changes in attitudes towards psychological services. Fischer and Turner concluded that interventions such as education programs could be designed to modify the existence of negative attitudes and recommended that the ATSPPHS had the potential to measure changes derived from such programs.

Questionnaires Measuring Perceptions of Sport Psychological Services

Specific to measuring attitudes towards those who seek sport psychology services, Martin and colleagues (Martin et al., 1997; Wrisberg & Martin, 1994) developed a questionnaire titled the Attitudes Toward Seeking Sport Psychology Consultation

Questionnaire (ATSSPCQ). The 50-item ATSSPCQ was constructed from counselling and sport psychology research (e.g., ATSPPHS; Fischer & Turner, 1970) to measure (a) stigmatisation, (b) recognition of need, (c) confidence in using sport psychology, (d) social desirability, and (e) interpersonal openness. Martin et al.'s principal components analysis, however, identified only three dimensions; stigma tolerance, confidence in sport psychology consultation/recognition of need, and interpersonal openness/willingness, that accounted for 35% of the total variance. Martin et al. administered the ATSSPCQ twice to student-athletes attending a diet and nutrition class from a NCAA Division I university to determine test-retest reliability of the ATSSPCQ. An overall Cronbach's alpha coefficient of .71 was obtained and alpha coefficients of .89, .81, and .64 were reported for components 1, 2, and 3 respectively. Test-retest administration was then completed over an eight-week period with correlations for the entire ATSSPCQ of .89, and test-retest correlations of .93, .88, and .85 obtained for the three components. Martin et al. retained 50 items with factor loadings of .23, or greater but the relatively low amount of variance accounted for and the liberal criterion for inclusion on a factor, are questionable in terms of the validity of the instrument. Factor loadings of at least .3 have been recommended as a minimum factor cut-off for items to contribute to the meaning of a factor (Aron & Aron, 1994; Cattell, 1978). Martin et al. also renamed the constructs of confidence in sport psychology and recognition of need as one factor, but doing so resulted in an unclear factor meaning. For example, athletes having confidence that sport psychology services will improve performances or resolve issues, does not necessarily mean that athletes will recognise when they need to seek psychological services. Similarly, recognising the need to access psychological services does not necessarily ensure the individual will have confidence in sport psychology services once they commence. Martin et al. also surveyed a different sample of male and female African American and Caucasian student-athletes

from the same university to identify possible differences based on gender and race. Differences were found for both gender and race in relation to the stigma of consulting a sport psychologist. Not surprisingly, black athletes perceived consulting a sport psychologist as more stigmatising than white athletes, and male athletes held more stigmatising views than female athletes did (Martin et al.). Martin et al. indicated that if cultural mistrust exists, mistrust would also exist towards the profession of sport psychology because the majority of sport psychology consultants are Caucasian. Martin et al. showed significant differences in attitudes regarding stigmatising those who seek sport psychology services between athletes of different cultural background and gender, and provided explanations for why those differences exist. Martin et al. concluded their results reinforced that sport psychologists need to be mindful of the cultural, gender, and individual differences of athletes for consultation to be successful. The external validity of Martin et al.'s findings, however, may be limited given the sample was from one NCAA Division I University whose staff and programs supported the use of sport psychology services.

More recent studies have extended and expanded direct measurement of perceptions towards those who use sport psychology services (e.g., SPAQ). Harmison (1999) replicated and extended Martin et al.'s (1997) research of the 50-item Attitudes Toward Seeking Sport Psychology Consultation Questionnaire (ATSSPCQ). The ATSSPCQ was administered to 405 male and female Caucasian and African American student-athletes with and without previous sport psychology experience. The sample represented 11 NCAA Division I, II, and III universities across 13 contact and non-contact sports. An exploratory factor analysis was conducted and the ATSSPCQ was refined to a three-component solution, namely, (1) confidence in sport psychology, (2) stigma tolerance, and (3) preference for similarity, accounted for 28.7% of the overall

variance with item loadings of .40 or greater being retained for analysis. Following Harmison's research of the ATSSPCQ, a number of items were either removed, combined or reworded to develop the 25-item Sport Psychology Attitude Questionnaire (SPAQ). Harmison also researched the differences that may exist for gender, race, sport, and previous sport psychology experience, using the factors of the ATSSPCQ as dependent variables. Harmison found similar to previous research female and non-contact sport athletes had more confidence in sport psychology services than male and contact sport athletes. Female athletes were also more likely to be accepting of those who seek sport psychology services than males and as a result, less likely to stigmatise other athletes who use the services. Harmison also found, similar to previous findings (Ravizza, 1988, 1990; Schell et al., 1984), that athletes with previous sport psychology consultation experience and confidence in sport psychology, were more likely to consult a sport psychologist for assistance in future, compared to those without previous exposure or not having confidence in sport psychology services.

Specific to the issue of similarity preference, Harmison (1999) revealed that African American athletes are more likely to prefer a sport psychologist who is similar compared to Caucasian athletes, who do not have a preference to work with a sport psychologist who is similar. The issues of having confidence in psychological services, stigmatising those who use psychological services, or having a preference for similarity with the psychologist, reinforces the importance of defining the consultation process and having specific service delivery goals agreed upon when commencing service delivery. Specific, race, gender, and other individual differences of the client should be given appropriate consideration by the psychologist to increase the likelihood of effective service delivery (Furnham & Wardley, 1990; Martin et al., 1997; Ravizza, 1988; Wong, 1994; Yambor & Connelly, 1991).

Rationale for the Current Study

Like any industry that is viewed by the community with respect for the services that it provides, a profession needs to examine its purpose and its service delivery through ongoing self-scrutiny. The current study explored and measured the athletes' attitudes towards the use of sport psychology services. Several North American studies have examined the perceptions of athletes, coaches, sports professionals, and the general public regarding the use of sport psychology services (Harmison, 1999; Linder et al., 1991, 1989; Martin et al., 1997; Schell et al., 1984; Van Raalte et al., 1990, 1992). It is unclear, however, as to whether the findings of these studies extend to Australian sport and the corresponding practice of sport psychology.

The first aim of the study was to investigate attitudes of Australian athletes towards the use of sport psychology services by comparing the responses of male and female athletes and athletes with sport psychology experience and no sport psychology experience. Specifically, the ways in which males and females responded to sport psychology services and the amount of exposure to sport psychology were examined in relation to the three factors of the SPAQ (i.e., (a) confidence in sport psychology, (b) stigma tolerance, and (c) preference for similarity). A second aim was to examine the psychometric properties of the SPAQ with an Australian athlete population. Confirmatory factor analysis was calculated to determine if the three factors of confidence in sport psychology, stigma tolerance, and preference for similarity were consistent with the factors Harmison (1999) identified when using Australian athletes.

Hypotheses

1. It was hypothesised that females will be more confident in the use of sport psychology services than males.

2. It was hypothesised that females will be more stigma tolerant of those who use sport psychology services than males.
3. It was hypothesised that males will have a preference for a sport psychology consultant of similar background to their own more than females.
4. It was hypothesised that participants with previous sport psychology experience will be more confident in the use of sport psychology services than participants with no previous sport psychology experience.
5. It was hypothesised that participants with previous sport psychology experience will be more stigma tolerant of those who use sport psychology services than participants with no previous sport psychology experience.
6. It was hypothesised that participants with previous sport psychology experience will have a preference for a sport psychology consultant of similar background to their own more than participants with no sport psychology experience.

CHAPTER 3

Method

Participants

The participant sample consisted of 179 male (n = 117) and female (n = 62) athletes, ranging in age from 17 to 69 years. The competition levels ranged from amateur sport to professional sport and included 13 recreational, 74 club, 36 state, 28 national, and 28 international level athletes. The sports represented were Australian rules football, netball, hockey, badminton, tennis, basketball, tennis, swimming, cycling, golf, karate, equestrian, rowing, rugby, cricket, and track and field.

Measures

All participants completed a demographic questionnaire (see Appendix C), the Sport Psychology Attitude Questionnaire (SPAQ; Harmison, 1999, see Appendix D). Demographic information included age, sex, sport, competition level, years involved in the sport, and previous exposure to a sport psychologist. Previous sport psychology experience was defined as either attending at least one workshop or consulting a sport psychologist on one or more occasions.

Sport Psychology Attitude Questionnaire (SPAQ). The 25-item SPAQ (Harmison, 1999) was developed from the original 50-item Attitudes Toward Seeking Sport Psychology Consultation Questionnaire (ATSSPCQ; Martin, et al., 1997). The SPAQ consists of three subscales measuring the factors (a) confidence in sport psychology (11 items), (b) stigma tolerance (6 items), and (c) preference for similarity (8 items).

The first factor, confidence in sport psychology consultation, consists of 11-items that assessed athletes' perceived confidence in sport psychology consultation and their ability to recognise when help was needed (e.g., *"A sport psychology consultant could help me fine tune my sport performance").* The second factor, stigma tolerance, comprises

6-items that dealt with the presence of negative stereotyping associated with using the services of a sport psychology consultant (e.g., *"I would work with a sport psychology consultant even though some people might label me a mental patient").* The third factor, preference for similarity, consists of 8-items relating to the athletes' preference for working with a sport psychology consultant being of similar background to their own (e.g., *"I would be most comfortable working with a sport psychology consultant from a racial, ethnic, or cultural group similar to my own").* Each of the SPAQ items are scored based on a 7-point Likert scale anchored by the terms "Strongly Disagree" and "Strongly Agree." As stated earlier, Harmison (1999) has reported satisfactory psychometric properties for the SPAQ.

Factor Analysis. Structural equation modelling (SEM) provided a method of simplifying the items of the questionnaire into key factors that described attitudes towards sport psychology services. SEM is widely used to validate scales, inventories, and questionnaires (Hair, Anderson, Tatham, & Black, 1995; Kline, 1994). SEM has also previously been implemented to identify the psychometric properties of the SPAQ (Harmison, 1999; Martin et al., 1997). Factor analysis enables the discovery of key constructs explaining the correlation matrix between many variables that may not otherwise be easily observed such as the correlation matrix of items of the SPAQ (see Appendix E) (Anderson & Gerbing, 1988; Hair et al., 1995; Kline). There are some limitations, however, to consider when using factor analysis. For example, there are numerous mathematical techniques to calculate factor analysis, and the process of how many factors to extract and which factor loadings are significant have been debated widely (e.g., Hair et al., 1995; Kline, 1994). This degree of subjectivity, therefore, can make it difficult to replicate previous factor analytic research and for this reason, the process followed by Martin el al., (1997), and later Harmison (1999), were largely

adhered to in this research. Harmison (1999) described the SPAQ as a three-factor model and thus in this current study I attempted to confirm the three-factor structure using Australian participants. To validate the three-factor model, a Root Mean Squared Residual (RMSR) was calculated. The RMSR is the amount of variance that remains after the factors have been extracted, and a threshold of less than .05 was needed to confirm the existing factor structure of the SPAQ (Hair et al., 1995). From the outset the intension was that if the RMSR did not confirm the existing factor structure, then an exploratory principal components analysis would be performed to examine the factor structure using the current sample. In the event of having to complete an exploratory factor analysis, five criteria were considered in determining the number of factors to rotate; (a) the factorability of the correlation matrix, (b) factors with an eigenvalue greater than 1.0, (c) the scree plot, (d) the percentage of variance accounted for by the factors, and (e) items with a factor loading of at least 0.45 (Hair et al., 1995; Aron & Aron, 1994).

The software used to analyse the data and perform the confirmatory and exploratory principal components factor analysis was calculated using the Statistical Package for Social Sciences (SPSS) version 10.0 (1999) (Coakes & Steed, 1996).

Procedures

A range of sporting institutions, professional sporting clubs, amateur sporting groups, and sports medical clinics were approached to endorse participation. The athletes who participated were located in Melbourne metropolitan region, Victorian country region, Australian Capital Territory, and New South Wales. For each group of athletes, a designated research assistant (RA) administered and collected the questionnaires from the athletes. The RA was the contact person at each of the sport organisations and was involved in endorsing participation in the research. In each meeting with the RAs, standard informed consent was explained such as voluntary participation, confidentiality,

and that participants could withdraw from the study at anytime. Participants were asked to take part in the study at the completion of a training session. The nominated RA provided an information cover letter for participants to read and keep outlining contact details of the study (see Appendix A). All participants read and signed consent forms prior to participation (see Appendix B). Participants were provided with an opportunity to ask questions regarding the completion of the forms prior to completing a copy of the demographic questionnaire (see Appendix C) and the SPAQ (see Appendix D). Upon completion, athletes returned the questionnaires to the RA in a sealed envelope before leaving training, who in turn sealed all participant responses in a group envelope and returned to the researcher for analysis.

CHAPTER 4

Results

Participants were asked to indicate the degree to which they had previously had involvement with sport psychology or a sport psychologist. The sample consisted of 111 (62%) participants that had no prior experience with sport psychology, and 68 (38%) had either attended a workshop or had individual sport psychology consultation experience. Of those who had some experience with a sport psychologist, 26.5% (n = 18) had undergone between 1 and 3 individual consultations, and 29.5% (n = 20) had undergone 4 or more individual sessions. Almost half the participants (48.5%) had attended between 1 and 3 workshops, while 40% had attended 4 or more workshops. Table 4.1 summarises the types of sport psychology experiences of male and female participants separately.

Table 4.1

Types of Sport Psychology Experiences of Male and Female Participants (n = 179)

	Level of Sport Psychology Experience				
Group	None	Individual and Workshop	Individual only	Workshop only	Total
Gender					
Male	73 (62.4%)	15 (12.8%)	3 (2.6%)	26 (22.2%)	117
Female	38 (61.3%)	15 (24.2%)	5 (8.1%)	4 (6.4%)	62
Total	111	30	8	30	179

The sample of participants also represented a range of competition levels including recreational, club, state, national, and international. When comparing experience and no sport psychology experience athletes, there was a high proportion of athletes at state level (52.8%) and national level (60.7%). As might be expected there

were more participants at international level (85.7%), with sport psychology experience. The numbers of participants receiving individual consultation or attending sport psychology workshops for each level of competition are displayed in Table 4.2.

Table 4.2

Descriptive Statistics for Participant Sport Psychology Experience and Level of Competition (n = 179)

	Gender		Sport Psychology Experience		
Level of Competition	Male	Female	None	Individual Consultation and/or Workshop	Total
Recreation	(85%)	(15%)	12 (92.3%)	1 (7.7%)	13
Club	(72%)	(28%)	59 (79.7%)	15 (20.3%)	74
State	(86%)	(14%)	19 (52.8%)	17 (47.2%)	36
National	(46%)	(54%)	17 (60.7%)	11 (39.3%)	28
International	(32%)	(68%)	4 (14.3%)	24 (85.7%)	28

A 2 (gender) x 2 (level of sport psychology exposure) Multivariate Analysis of Variance (MANOVA) was conducted to examine participant perceptions of sport psychology services. Measures on the three factors of the SPAQ, that is, confidence in sport psychology, stigma tolerance, and preference for similarity, were the dependent variables. Table 4.3 reports summary statistics for the three factors as a function of participants' gender and level of sport psychology exposure.

Table 4.3

Descriptive Statistics for the Three Factors by Gender and Level of Sport Psychology Experience (n = 179)

		Confidence in Sport Psychology		Stigma Tolerance		Preference for Similarity	
Group	n	M	SD	M	SD	M	SD
Gender							
Male	117	57.55	8.34	31.89	4.66	34.19	5.55
Female	62	54.23	9.77	32.35	4.53	33.92	4.95
Sport Psychology Experience							
No Experience	111	54.35	8.92	31.42	4.80	33.54	5.65
Experience	68	59.74	8.08	33.07	4.10	35.00	4.68

It was hypothesised that there would be a significant difference between male and female athletes' attitudes towards sport psychology consultation. The results of the MANOVA indicated there was a significant main effect for gender, Wilks Lamba = .94, F (1, 175) = 3.54, p = .016, ES = 0.06. Follow-up univariate analysis revealed that Factor 1, confidence in sport psychology, was the only dependent variable in which males and females were significantly different, F (1, 175) = 6.02, p = .015, ES = 0.03. The results indicated that male athletes (mean = 57.6) were more confident in using the services of a sport psychologist than were female athletes (mean = 54.2). The hypothesis that females would be more confident than males to use sport psychology services was thus rejected (see Table 4.3).

It was also hypothesised that there would be a significant difference between the perceptions of athletes with sport psychology experience and no sport psychology

experience toward sport psychology services. The results of the MANOVA also indicated a significant main effect for sport psychology experience, Wilks' Lambda = .90, F (1,175) = 6.32, $p < .001$, ES = 0.10. Follow-up univariate analysis identified significant differences for all three Factors. Factor 1, confidence in sport psychology, was significant, F (1, 175) = 15.64, $p < .001$, ES = 0.08. Participants who had previous sport psychology consultation experience (mean = 59.7) were more confident in using sport psychology services than those without previous experience (mean = 54.4). The hypothesis that participants with sport psychology experience would be more confident in sport psychology services than participants without sport psychology experience, therefore, was accepted (see Table 4.3). Factor 2, stigma tolerance, was significant, F (1, 175) = 4.89, p = .028, ES = 0.03. Participants were more stigma tolerant of the services of a sport psychologist if they had previous sport psychology experience (mean = 33.1), compared to participants with no previous experience (mean = 31.4). The hypothesis that participants with sport psychology experience would be more stigma tolerant of those who use sport psychology services than participants without sport psychology experience, therefore, was accepted (see Table 4.3). Factor 3, preference for similarity, was also significant, F (1, 175) = 4.09, p = .045, ES = 0.02. Participants had more preference for a sport psychologist of similar background to their own if they had previous sport psychology experience (mean = 35), compared to participants with no previous experience (mean = 33.5). The hypothesis that participants with sport psychology experience would have preference for a sport psychologist of similar background to their own more than participants without sport psychology experience, therefore, was accepted (see Table 4.3).

Finally, it was hypothesised that there would be a significant interaction of gender and sport psychology experience in relation to attitudes towards sport psychology

services. The MANOVA indicated no significant differences on any of the three factors, Wilks' Lambda = .99, F (1, 175) = .371, p = .774, ES = 0.01. Table 4.4 reports the descriptive statistics for the dependent variables as a function of gender and level of sport psychology exposure.

Table 4.4

Descriptive Statistics for the Dependent Variables as a Function of Gender and Level of Sport Psychology Experience (n = 179)

		Confidence in Sport Psychology		Stigma Tolerance		Preference for Similarity	
Group	n	M	SD	M	SD	M	SD
Male							
Experience	44	60.91	7.98	32.93	4.26	34.70	4.81
No Experience	73	57.55	8.34	31.89	4.66	34.19	5.55
Female							
Experience	38	57.58	7.98	33.33	3.86	35.54	4.49
No Experience	24	52.11	10.29	31.74	4.86	32.89	5.01

Internal Reliability of the SPAQ

The reliability of the SPAQ was examined by calculating Cronbach's alpha for the entire SPAQ, and then for each of the three factors. The analysis was undertaken to determine whether Harmison's (1999) three factor structure, with the factors; (a) confidence in using sport psychology, (b) stigma tolerance, and (c) preference for similarity, was supported by the obtained data from the present sample. The Cronbach alpha coefficient for the SPAQ overall was $\alpha = .74$. The reliability coefficient of the three

factors of confidence in sport psychology, stigma tolerance and preference for similarity were $\alpha = .82$, $\alpha = .55$, and, $\alpha = .35$, respectively (see Table 4.5). The overall reliability of the SPAQ and factor (a), confidence in using sport psychology, were acceptable and stable, however, factor (b), stigma tolerance, and factor (c), preference for similarity, were low relative to acceptable internal consistency standards of .70 or greater (Aron & Aron, 1994; Cronbach, 1951). Table 4.5 reports the Cronbach's alpha coefficients of confidence in using sport psychology, stigma tolerance, and preference for similarity for the SPAQ.

Table 4.5

Factor Loadings for Confidence in Using Sport Psychology, Stigma Tolerance, and Preference for Similarity (n = 179)

Factors	Item Loadings	If Item Deleted
Factor 1 Confidence in Using Sport Psychology		
Item 1. A sport psychology consultant could help me fine tune my sport performance.	.65	.79
Item 4. A sport psychology consultant does not have the knowledge and skills to help me perform better.	.27	.82
Item 7. I do not have much respect for sport psychology consultants.	.51	.80
Item 10. I would follow the suggestion a sport psychology consultant gave to me.	.44	.81
Item 12. If my emotional distress was affecting my performance, talking to a sport psychology consultant would be helpful.	.51	.80
Item 13. I would work with a sport psychology consultant despite some people's belief that athletes do not need that type of assistance.	.40	.81
Item 14. If I were having problems during competition, such as a difficulty with focusing or handling pressure, a sport psychology consultant would be more helpful than a coach or anyone else.	.52	.80
Item 16. Considering the time and expense involved in working with a sport psychology consultant, it would have little value for me.	.57	.79
Item 19. If a teammate asked my advice about how to become mentally tougher, I would recommend that he/she see a sport psychology consultant.	.40	.81
Item 22. To help me better understand myself as an athlete, I would discuss personal matters with a sport psychology consultant.	.52	.80
Item 25. If I were worried or upset about my sport performance, I would get help from a sport psychology consultant.	.56	.80
Reliability Coefficient:		.82

Factor 2 Stigma Tolerance		
Item 2. I would work with a sport psychology consultant even though some people might label me a "mental patient".	.67	.52
Item 5. Working with a sport psychology consultant is bad for an athlete's reputation.	.36	.49
Item 8. It would not matter to me what my coach thought about my working with a sport psychology consultant.	.08	.64
Item 17. It would not bother me if people knew I was receiving help from a sport psychology consultant.	.46	.43
Item 20. If I thought I needed mental training to improve my sport performance, I would get help even if others knew about it.	.46	.45
Item 23. If I worked with a sport psychology consultant, I would not want my teammates to know about it.	.32	.49
Reliability Coefficient:		*.55*
Factor 3 Preference for Similarity		
Item 3. I would be most comfortable working with a sport psychology consultant from a racial, ethnic, or cultural group similar to my own.	.26	.25
Item 6. If I worked with a sport psychology consultant, I would want him/her to have attitudes and values similar to my own.	.36	.20
Item 9. If I worked with a sport psychology consultant, I would want him/her to be of the opposite gender.	-.32	.52
Item 11. I would prefer working with a sport psychology consultant who has a competitive athletic background similar to my own.	.36	.21
Item 15. I would relate best to a sport psychology consultant who is from a socioeconomic level different than my own.	-.31	.51
Item 18. If I worked with a sport psychology consultant, I would want him/her to have a personality similar to mine.	.40	.18
Item 21. If I worked with a sport psychology consultant, I would want him/her to have similar life experiences as I.	.30	.25
Item 24. I would respect most the opinions of a sport psychology consultant from my own racial, ethnic, or cultural group.	.23	.27
Reliability Coefficient:		*.35*
Overall Reliability Coefficient		*.74*

The confirmatory factor analysis did not confirm the factor structure of the SPAQ, the Root Mean Squared Residual (RMSR) was .14, however, for confirmation, a RMSR of less than .05 is normally needed. Thus, an exploratory principal components analysis was performed. An examination of the correlation matrix (see Appendix E) indicated that a considerable number of correlations exceeded .30, therefore, the data were suitable for factoring (Hair et al., 1995; Aron & Aron, 1994). In addition, the Bartlett Test of Sphericity was significant (Sphericity = 1297.02, $p < .001$), and the Kaiser-Meyer-Olkin

(KMO) measure of sampling adequacy was greater than .60 (KMO = .805), indicating suitable data (Coakes & Steed, 1996). A varimax rotation was performed to transform the initial factor matrix to a simple structure that resulted in a five-factor solution.

Exploratory principal components analysis provided a five factor solution (omitting Factor 6) that presented a simple structure incorporating 24 of the 25 items in the SPAQ, and accounted for a significant proportion (51.5%) of the overall response variance, with item loadings of .45 or greater (see Table 4.6). Several items with factor loadings of .30 or greater also loaded on more than one factor, indicating some multicollinearity. Following the principal components factor analysis, internal consistency of the five-factor solution was examined. Cronbach's alpha coefficients calculated for the factors were; (a) Confidence to Help With Performance (α = .76), (b) Recognition of Personal Need (α = .72), (c) Sport Psychologist and Athlete Likeness (α = -.56), (d) Stigma of Using a Sport Psychology Consultant (α = .66), and (e) Interpersonal Similarity (α = .62).

The first factor, labelled "confidence to help with performance", comprised items describing the degree of confidence that athletes had in sport psychology consultants being able to help them with their sporting performance. This first factor consisted of seven items that accounted for 21.4% of the total variance. The second factor, labelled "recognition of personal need", accounted for 12.6% of the total variance and consisted of five items that described an athlete's personal need to seek a sport psychology consultant. The third factor, labelled "sport psychologist and athlete likeness", consisted of four items that related to the athlete's preference for a sport psychologist being of similar background to the athlete. This third factor accounted for 6.3% of the total variance. The fourth factor, labelled "stigma of using a sport psychology consultant", accounted for 5.9% of the total variance. Four items that loaded on this factor described an athlete's

stigma tolerance of consulting a sport psychologist. The fifth factor, labelled "interpersonal similarity", comprised of items dealing with the personality and past life experience similarities between the athlete and sport psychology consultant. The fifth factor consisted of four items that accounted for 5.3% of the total variance. A sixth factor also met the exploratory principal components analysis criteria for inclusion, however, only one item (item 8) loaded on it, and therefore the factor was not included. Item 8 relates to the athlete's concern about the coach being aware of them working with a sport psychologist. This factor may relate to stigma tolerance the coach has of an athlete consulting a sport psychologist, rather than stigma tolerance of the general public. No other items evaluated athlete perceptions about coaches. Further items relating to the coach's attitude and perceptions, therefore, would most likely need to be included in the SPAQ to fully investigate and understand this factor. Table 4.6 reports the exploratory principal components factor loadings providing a five-factor solution for the SPAQ.

Table 4.6

Factor Loadings for Items of the SPAQ Following Exploratory Factor Analysis (n = 179)

Factors	Loadings				
	Confidence	Recognition	Likeness	Stigma	Similarity
Factor 1: Confidence to Help With Performance					
Item 1.	.690	.355	.035	.010	.208
Item 4.	.450	.124	-.589	-.002	.067
Item 7.	.539	.215	-.029	.334	-.148
Item 14.	.472	.382	.269	.043	.087
Item 16.	.732	.239	-.098	-.033	-.164
Item 19.	.555	-.042	.186	.308	.242
Item 25.	.676	.112	.232	.160	-.006
% Total Variance:	*21.4%*	-	-	-	-
Factor 2: Recognition of Personal Need					
Item 2.	.089	.777	.106	.042	-.043
Item 10.	.184	.532	.105	.261	.039
Item 12.	.241	.589	-.068	.372	.055
Item 13.	.206	.603	-.117	.084	-.037
Item 22.	.399	.498	.293	.034	-.311
% Total Variance:	-	*12.6%*	-	-	-
Factor 3: Sport Psychologist and Athlete Likeness					
Item 3.	.059	.215	.544	.125	.319
Item 9.	.145	-.192	-.496	.307	-.236
Item 15.	-.348	.000	-.678	.068	.045
Item 24.	.337	-.028	.658	-.006	.193
% Total Variance:	-	-	*6.3%*	-	-
Factor 4: Stigma of Using a Sport Psychology Consultant					
Item 5.	.305	.240	-.329	.504	.051
Item 17.	.114	.246	.068	.665	-.040
Item 20.	.194	.379	.059	.649	-.022
Item 23.	-.017	-.019	-.067	.689	-.140
% Total Variance:	-	-	-	*5.9%*	-

Factor 5: Interpersonal Similarity					
Item 6.	.042	-.203	.062	.070	.681
Item 11.	.068	.120	.245	.033	.558
Item 18.	-.032	-.102	-.013	-.221	.788
Item 21.	.028	.185	.309	-.346	.472
% Total Variance:	-	-	-	-	*5.3%*
Factor 6					
Item 8.	.808	-	-	-	-

Chapter 5

Discussion

The aims of this study were to investigate perceptions of sport psychology services in Australian athletes and to review the psychometric properties of the SPAQ. Although researchers in North America have examined athletes' perceptions regarding the use of sport psychology services, similar studies have not been conducted in Australia. It is unclear, for example, whether perceptions held by Australian athletes are similar to those held by North American athletes. This discussion will start by reviewing the descriptive statistics and psychometric results including specific reliability and validity findings. Although six hypotheses regarding perceptions of sport psychology services were proposed, only the two hypotheses relating to confidence in using sport psychology services will be discussed. The remaining four hypotheses relating to stigma tolerance and preference for a sport psychologist with a similar background will not be discussed because of poor reliability of these two scales with the present population.

Descriptive Statistics

In terms of descriptive results it was clear that participants in the present study were relatively favourable toward sport psychology services. For two of the three SPAQ sub-scales (i.e., confidence in sport psychology and stigma tolerance) mean scores represented the equivalent of approximately "moderately agree" or 5 on a 7-point likert scale. The mean scores for preference for similarity represented approximately 4.5 on a 7-point likert scale. Thus, it appears the current findings were relatively more favourable towards sport psychologists than the results of previous perceptions of sport psychology research. In drawing conclusions from the present data I used Martin et al. (1997) as a reference sample because Harmison (1999) did not publish individual item and factor means. Martin et al. reported an average stigma tolerance item mean of 3.33 which is

approximately 1.00 point lower than the average stigma tolerance item mean in the present study. For confidence in sport psychology/recognition of need in working with a sport psychologist, Martin et al. reported an item mean of 4.20. This is approximately .50 point lower than the average confidence in using a sport psychologist item mean in the present study. Additional research is needed to confirm that Australian athletes are more favourable to sport psychology services compared to U.S.A college athletes. Researchers might for example, examine the specific reasons that Australian athletes are relatively confident and stigma tolerant to sport psychology services.

Reliability Issues

Internal Reliability of the SPAQ

Using Cronbach alpha the overall internal consistencies of the SPAQ in the present study was an acceptable ($\alpha = .74$). Additional sub-scale analyses showed estimates for confidence in using sport psychology to be ($\alpha = .82$). The other two proposed factors, stigma tolerance ($\alpha = .55$) and preference for a sport psychologist with a similar background ($\alpha = .35$), were below the usual acceptable level of .70 (Aron & Aron, 1994). Thus, the overall internal consistency, as with earlier studies of the SPAQ was acceptable (Harmison, 1999; Martin et al., 1997), however, internal consistency estimates for two of the sub-scales was questionable. Poor internal consistency in the present study provides evidence that the items designed to measure stigma tolerance and preference for a sport psychologist with a similar background probably need revision.

Factor Structure

Based on the reported three-factor model proposed by Harmison (1999) confirmatory factor analysis (CFA) was first used in the present study. As reported, the Harmison model did not prove robust using CFA. A subsequent principal components factor analysis was computed and again the proposed five-factor model did not prove

stable. The five factors extracted in the present study, however, included three similar factors to those extracted previously by Martin et al. (1997) and Harmison. The main difference between this study and Martin et al. and Harmison was the overall amount of explained variance. The five-factor solution extracted in the present study accounted for almost 52% of the explained variance compared to Martin (35%) and Harmison (29%). The five-factor model did not prove to be stable, which provides further indication that the SPAQ requires additional item revision. Specifically, for factors such as, (c) sport psychologist and athlete likeness, (d) stigma of using a sport psychology consultant, and (e) interpersonal similarity that had unacceptable internal consistency.

Test Design Issues

Before attempting to make specific conclusions regarding the SPAQ, some basic rules of test construction need to be described before proceeding to assess whether the 25-item SPAQ adheres to these rules. In designing a multidimensional questionnaire, test constructors are attempting to strike a fine balance between competing objectives. First, items should reflect the proposed construct accurately. Second, well-designed questions will tap the full breadth of proposed factors (Clark & Watson, 1995). Test designers will normally pay close attention to construct and content validity issues to achieve these first two objectives. Third, moderate inter-item reliability estimates are preferred to balance the competing demands of within scale heterogeneity and homogeneity. For example, Clark and Watson recommend average inter-item correlations fall in the .15-.50 range for broadly defined constructs and .40-.50 for more narrowly defined constructs. Stated simply, Green (1978) suggested test designers should attempt to present a calm sea of highly similar inter-item correlations. Based on the findings of the present study, the inter-item correlations for stigma tolerance and preference for a sport psychologist with a similar background reflect a choppy-to rough sea forecast at best.

Validity Issues

Questions regarding the construct validity of the SPAQ might reasonably be asked. For instance the SPAQ has been designed to measure perceptions of sport psychologists, and more specifically three proposed aspects of these perceptions relating to confidence in using a sport psychologist, social stigma in using a sport psychologist, and preference for using a sport psychologist with a similar background. From a breadth perspective two questions arise: First, to what extent do the three SPAQ factors represent the entire domain of "perceptions of sport psychology?" Second, how representative of the three proposed factors are the items designed to reflect each factor?

With respect to the first question regarding domain breadth it might be asserted other factors affect athlete perceptions of sport psychologists outside of the three factors proposed by Harmison (1999). For example, confidence in using sport psychology services is most likely closely tied to the perceived adequacy of the sport psychology practitioner. The SPAQ confidence in using a sport psychologist factor can be assumed to represent, either an abstraction of what a sport psychologist would be like (for those athletes that haven't actually worked with a sport psychologist), or a conglomeration of sport psychology experiences (for those athletes that have worked with a sport psychologist). Thus, the SPAQ might have limited external validity because athlete perceptions are easily confounded by either a lack of experience working with sport psychologists, or varied experiences with a number of sport psychologists of different abilities. Hence, the scope of the SPAQ appears to be lacking in terms of addressing natural variations in practitioner quality. For example, to be confident that we have a true representation of the true range of perceptions of sport psychologists we would need to recruit a stratified sample of all the sport psychologists in a given population and a stratified sample of athletes in a given population. The present study did at least show that

greater exposure to sport psychology services is correlated with more favourable perceptions of sport psychology.

A review of Martin et al.'s (1997) ATSSPCQ development confirmed the original constructs of stigma, recognition of need, confidence in sport psychology, social desirability, and interpersonal openness. Martin et al. attempted to combine these constructs to form stigma tolerance (i.e., 21% of variance), confidence in sport psychology/recognition of need (i.e., 7.2% of variance), and personal openness/openness to sport psychology consultation (i.e., 6.4% of variance). Martin demonstrated the possible existence of other factors, however, given the unacceptable variances for confidence and personal openness, those factors would have needed further item development and rewording. Harmison (1999) attempted this by developing the factors of confidence, stigma tolerance, and preference for a sport psychologist with similar background, that being the same factors researched in this study. The results of the Exploratory Factor Analysis in the present study also provide an indication that additional factors are needed to capture the complete picture of athletes' perceptions of sport psychology services.

With respect to the second question regarding the items chosen to represent each factor, and given the low percentage of variance for stigma tolerance and preference for a sport psychologist of similar background, a number of limitations require discussion. Experts in test construction (e.g., Comrey, 1988) suggest that items need to be simply worded and appropriate for the reading level of the target audience, not based on colloquialisms or trendy expressions, modified if the wording has become outmoded, and not "double-barrelled" items that assess more than one characteristic. A number of the items associated with stigma tolerance and preference appear to be ambiguous and may not measure what they purport to measure. For example, the item, *"If I worked with*

a sport psychology consultant, I would want him/her to have attitudes and values similar to my own" is somewhat ambiguous in terms of specifically what attitudes and values are being questioned. Some participants may have interpreted the item as referring to sporting attitudes and values, whereas others may have interpreted the item as referring to broader family attitudes and values. The wording of some items may be inappropriate for some athletes. For example, the item *"I would relate best to a sport psychology consultant, who is from a socioeconomic level different than my own,"* may contravene the principle of appropriate language given that not all respondents would understand what *socioeconomic level* refers to. In addition, with respect to questions measuring the preference for similarity, it appears that some items query whether the respondent would relate rather than prefer a sport psychologist from a similar background. For example, item 15 *"I would relate best to a sport psychology consultant who is from a socioeconomic level different than my own"* (negatively worded item). Also, items relating to background issues such as personality appear to be flawed. To illustrate, the item, *"If I worked with a sport psychology consultant, I would want him/her to have a personality similar to mine"* assumes at least a rudimentary level of personal insight and understanding of personality constructs.

Stigma tolerance refers to an athlete's acceptance of other athletes consulting a sport psychologist. Stigma tolerance consisted of items such as, *"It would not bother me if people knew I was receiving help from a sport psychology consultant"* and *"If I thought I needed mental training to improve my sport performance, I would get help even if others knew about it."* These two items are limited at least on two grounds. First, all stigma tolerance items are worded to question whether the participants perceive others as stigma tolerant of the participant consulting a sport psychologist. There are no items worded to assess whether participants are stigma tolerant of other athletes consulting a sport

psychologist. Second, stigma by definition is related to perceptions or assumptions of negative experiences. Some participants who have previously had positive experiences consulting a sport psychologist may actually "advertise" that they are seeing a sport psychologist. Similarly, some athletes may derive some prestige from others knowing they are seeing a sport psychologist. Thus, athletes with previous positive experiences may interpret stigma tolerant questions differently or ambiguously. There were also no questions pertaining to issues of confidentiality that may concern clients when consulting a sport psychologist. When questioning participant stigma tolerance, there were also no questions regarding whether services were perceived as "professional."

Some questions also appear to be invalid for some sport sub-populations. For example, the question, *"If I worked with a sport psychology consultant, I would not want my teammates to know about it"* is exclusively worded for team athletes. Many sports, however, are individual pursuits and athletes in these sports would find this question irrelevant.

Other items appear to be poorly grounded in terms of construct validity. The question, *"If a teammate asked my advice about how to become mentally tougher, I would recommend that he/she see a sport psychology consultant"* may be interpreted differently by athletes. There is no clear understanding of what "mentally tougher" means. To some athletes this could mean having better concentration, while other athletes may believe this means coping with competition adversity. In fact, Jones, Hanton, and Connaughton (2002) expressed the opinion that the term mental toughness was widely misunderstood or not clearly defined even by sport psychologists. Jones et al. (2002) has attempted to clarify what mental toughness means from an elite athlete's perspective by recently publishing an article titled "What is this thing called mental toughness." Apart from this recent attempt to clarify the meaning of mental toughness there is not a substantial body

of scientific sport psychology literature on mental toughness. In a review of the related literature Jones et al. found many interpretations for mental toughness have been used. Thus, using mental toughness as part of the wording of items appears to be a dubious practice based on the likely breadth of interpretation respondents might assign to mental toughness.

One threat to internal validity of questionnaires is social desirability, that is, participants responding in a way they think would please the researcher. Knowing there was a likelihood of this occurring, I took a number of precautions to minimise the influence of social desirability. For example, participants were informed and reassured that confidentiality of their responses would be maintained (see Appendix A). Participants were also asked to complete the SPAQ either following a training session or during attendance at their sports medical clinic. Completion of the SPAQ, therefore, was not at the location where sport psychology services would normally be provided. Finally, the Research Assistants (RAs) were not sport psychologist, thus, reducing the likelihood of participants feeling compelled to endorse or respond positively (e.g., demand characteristic).

Hypotheses Testing

Based on the poor psychometric findings, only two of the six hypotheses (i.e., gender and sport psychology experience relating to confidence in using sport psychology services) will be discussed. It was predicted that females would be more confident in using sport psychology services than males (i.e., hypothesis one). The hypothesis was not supported because males were more confident in using sport psychology services than females. One possible explanation is professional competitions in Australia are dominated by male sport and leagues such as the Australian Football League (AFL) and the

Australian Rugby League. These leagues are generally well funded and employ a large team of support staff including sport psychologists (Kremer & Marchant, 2002). There are not any equivalent female sports, that are fully professional in Australia and hence able invest heavily in athlete support services. Males, therefore, may be aware of the benefits of consulting a sport psychologist because the services are readily available in professional male sports. The current research shows that males also accounted for a greater percentage of the athletes competing at an elite level (see Table 4.2). This may have resulted in more male athletes having exposure to the types of services offered by sport psychologists.

A second possible explanation may be that the stereotypes of males and females have changed from what they have been previously. In the past, females have apparently been more open and accepting of sport psychology services (Yambor & Connelly, 1991). Researchers have suggested male sport is often associated with a competitive "macho-image", therefore, they do not readily seek assistance as it may indicate weakness in their abilities (Harmison, 1999; Martin et al., 1997; Yambor & Connelly). Given that the means for both males and females in the present study were above the neutral point for confidence in using sport psychology services, it appears that males nowadays are viewing sport psychology differently than in the past. Maybe males have become more accepting because there is greater awareness, whereas females have continued to be accepting of sport psychology services.

Males were significantly more confident in using sport psychology services compared to females, however, the effect was minimal and did not reach a small effect size based on Cohen's (1988) conventions. Therefore, the results of this study indicate that male and female confidence in using sport psychology services was practically identical.

Results from studies examining gender differences and confidence in using sport psychology services have been inconsistent. Harmison (1999) found females were more confident, and Martin et al. (1997) found no differences. For some time, North American researchers have also indicated that while sports organisations are confident to use sport psychology services, they are not willing to pay for them (Ravizza, 1990). Perhaps sport psychology services have not been as readily accessible to athletes in the past, which may also explain why male athletes have previously lacked awareness and have been reluctant to use sport psychology services.

Based on the current findings three possible explanations exist. First, and in line with the results of the present study, changes in how males typically view sport psychology services have taken place. Second, the finding that males were more positive than females in respect to confidence in using sport psychology services is attributable to sport-cultural differences in Australia compared to the U.S.A where the majority of past research has taken place. Third, the unexpected gender finding in the present study might be related to the participant sample. In past studies, university or college level athletes have comprised the sample whereas in this study I recruited a broadly cross sectional type sample. More definitive conclusions would be somewhat speculative although a multi-national gender study testing perceptions of sport psychology services would seem a logical next step for researchers.

The second hypothesis that participants with sport psychology experience will be more confident in sport psychology services than participants without sport psychology experience was supported. Athletes who had experienced sport psychology services first hand were more confident in using sport psychology services than those without such experience. As with the first hypothesis, however, while a significant difference was computed, the difference using effect size analysis was nominal. Therefore, the current

research indicates that participants with previous sport psychology experience were only marginally more confident to use sport psychology services than participants without previous experience. Previous research has also indicated that once sport psychology services have been accessed, growth of future service delivery is substantial because athletes are more informed about sport psychology consultations (Schell et al., 1984).

It is possible that participants in this study with previous experience may have greater confidence in these services because they are more familiar with such factors as, the expected outcomes, the interventions, the processes and the ethical guidelines of sport psychology consulting. In addition, participants with sport psychology experience may have formed a relationship with one or more consultants through one on one consultation or attending a workshop. Meeting with a consultant, therefore, would establish a "face" to sport psychology for participants with experience compared to participants without experience.

Although experience included both workshops and individual consultations, perhaps different experiences influence athletes' perceptions of sport psychology differently. For example, the expertise of the sport psychologist may influence perceptions of sport psychology. Participants who have experienced a positive consultation and outcome may be confident in sport psychology services. Participants who have experienced a poor consultation, however, may perceive sport psychology to be a poor service and not want to consult any sport psychologist in future. Researchers could investigate in what ways sport psychology can be presented to make athletes confident that the services may help them and review whether a negative experience would influence accessing a sport psychologist in future.

Exploratory Factor Analysis

An exploratory principal components factor analysis was performed and five factors were extracted incorporating 24 of the 25 items in the SPAQ. The five factors were; (a) confidence to help with performance, (b) recognition of personal need, (c) sport psychologist and athlete likeness, (d) stigma of using a sport psychology consultant, and (e) interpersonal similarity. The names of the five factors were determined by reviewing the content of the items within each factor. Some multicollinearity, however, was evident with several items loading on more than one factor. When determining selection of items that loaded on multiple factors, the following considerations were made; (a) the items selected reflected the construct accurately, (b) each included item addressed a different issue related to that factor, and (c) inclusion of an item with a factor was also determined by a minimum inter-item correlation of .45. Cronbach's alpha coefficients were also calculated and identified factor (a) confidence to help with performance and factor (b) recognition of personal need, as stable and acceptable factors. The remaining three factors were below an acceptable alpha coefficient level of .7.

The exploratory factor analysis in the present study identified five factors that represent constructs similar to the factors originally developed for the ATSSPCQ (Martin et al., 1997). Of the five factors that have been established from sport psychology and counselling research, the factor that has remained most stable across studies has been *"confidence in sport psychology services."*

Exploratory factor analysis also revealed that additional item development would be required to broaden the range of issues that should be addressed within the five factors identified and item re-wording may also improve the reliability of the five factors. Furthermore, the content specificity of the confidence to help with performance could be improved. For example, questions relating to confidence in a sport psychologist

improving the athlete's goal setting strategies, preparation routines, anxiety control and concentration to perform could be included. These are fundamental skills that a sport psychologist provides and that an athlete should be confident to use if the athlete is confident in the services. The factor, "recognition of personal need" could also include questions that demonstrate recognition of issues that need specific psychological assistance, rather than seeking other coaching and support staff assistance. The factor "sport psychologist and athlete likeness" contained two items that were extremely similar in meaning (i.e., item 3 and item 24). Removing item 3 would increase the Cronbach's alpha level substantially from $\alpha = -.56$ to $\alpha = -.93$. This factor could also include items that relate to age and sport specific background similarities between the sport psychologist and the athlete. Stigma of using a sport psychology consultant relates to an athlete tolerating and having little concern for other athletes seeking sport psychology assistance. Questions may need to be reworded to reflect an athlete's stigma tolerance of other athletes consulting a sport psychologist, rather than how they believe others would perceive them. *"Interpersonal similarity"* refers to similar values and personality characteristics between the sport psychologist and the athlete. The skills of the psychologist to establish rapport are very important and would contribute to how well the sport psychologists works with the athlete. Questions, therefore, that involve the athlete relating to the psychologist, building rapport, or developing a working alliance with the athlete may also be included and contribute to the validity of the factor.

Limitations

Although the current research attempted to measure athletes' perceptions of sport psychology services in general, the responses of participants may have represented a reflection of their individual interactions with a particular service provider, rather than their perceptions of sport psychology services overall. Prior to commencement,

participants were advised to consider sport psychology in general rather than their interactions with specific individuals.

Participants completed a self-report questionnaire, and their responses may have been influenced by how they believed the researchers wanted them to respond, rather than solely by their own perceptions of sport psychology services. To overcome this limitation, participants were advised that their responses would be kept confidential and their involvement in the study would be anonymous. Overall, there is sufficient evidence that some reworking of the SPAQ is needed for it to meet satisfactory psychometric requirements of an Australian sports population.

Future Research

The current research needs to be replicated because it is the first to examine Australian athletes' perceptions of sport psychology services. Replication and extension will assist in determining whether the findings in this research are consistent in the Australian context. The present research demonstrated that the SPAQ had relatively low reliability coefficients and did not conform to the intended three-factor model of the SPAQ. Researchers should consider either revising the current SPAQ or testing alternative items that might better address perceptions of sport psychology services by expanding the current number of factors to more fully explain participant perceptions.

The present research has also highlighted a number of questions that warrant further investigation. Although gender and experience differences were found with regard to confidence in the use of sport psychology services, all participants indicated positive perceptions towards sport psychology services. Potential differences need to be investigated across different athletic populations. Previous research has reviewed the perceptions of university or college level athletes and in this study the sample was a broad cross section of athletes. Researchers might also benefit from investigating possible

differences between contact and non-contact sports, and between recreation and elite level sports. The link between the perceptions of sport psychology services and actual behaviour was not investigated. Researchers could examine how perceptions influence actual use of sport psychology services. Further investigations, could research ways sport psychology can be presented to encourage athletes to use the services and review whether a previous negative sport psychology consultation or workshop experience would influence accessing the services in future.

Conclusion

Perceptions of sport psychology services have been examined in North America and varied findings have been reported depending on the sample used. This study examined Australian athletes' attitudes towards sport psychology services. The overall perceptions of the athletes in this study appeared to be positive. There were differences found for gender and previous experience in relation to confidence in using sport psychology services. Overall, the SPAQ was internally consistent, however, only confidence in using sport psychology services was found to be reliable and stable. As sport psychology expands and more people attempt to make a living in sport psychology, it is important to understand the reactions of the consumer. The current study has provided an initial description of perceptions of Australian athletes, and has also provided a basis for future research to explore perceptions of sport psychology services within Australia.

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Appendix A: Covering Letter to Participants Regarding Purpose of Research

Dear Athlete,

We are conducting research to investigate attitudes of athletes towards sport psychology services. The Sport Psychology Department has approved and supports this project and we are writing to you to request your consent and participation in this study. **Please note: completion of the questionnaire entails consent.**

Participation involves completing the Sport Psychology Attitudes Questionnaire (SPAQ) and the athlete information page and returning the forms to the facilitator overseeing the completion of the questionnaire. It is estimated that the SPAQ should take between 10 to 15 minutes to complete. If you decide to participate, please complete the SPAQ and the athlete information page that has been provided and return them to your facilitator.

Responses will be analysed collectively as a whole group rather than individually and all information will be treated as **strictly confidential**. If you have any queries whatsoever regarding any aspects of the project, please feel free to contact one of us on the numbers below.

With many thanks in advance for your cooperation and participation.

Greg Harris:
Department of Human Movement, Recreation and Performance
Victoria University of Technology
Telephone: 0417 50 25 50

Dr. Mark Andersen:
Department of Human Movement, Recreation and Performance
Victoria University of Technology
Telephone: 9248 1132

Dr. Jeff Simons:
Department of Human Movement, Recreation and Performance
Victoria University of Technology
Telephone: 0411 08 1257

Any queries about your participation in this project may be directed to the researcher - (Name: Greg Harris ph.0417 50 25 50). If you have any queries or complaints about the way you have been treated, you may contact the Secretary, University Human Research Ethics Committee, Victoria University of Technology, PO Box 14428 MCMC, Melbourne, 8001 (telephone no: 03-9688 4710).

Appendix B: Participant Consent Form for Involvement in the Research

ATTACHMENT A

Victoria University of Technology

Consent Form for Subjects Involved in Research

INFORMATION TO PARTICIPANTS:

We would like to invite you to be a part of a study investigating attitudes of athletes towards sport psychology services. The sport psychology industry has experienced growth within professional and amateur sport, in sport overseas, and in Australian sport. What is still not entirely clear, is the level of use of psychological services in sport by Australian athletes. The primary aim of this study is to review the attitudes of Australian athletes towards sport psychology services.

CERTIFICATION BY SUBJECT

I, **(your name)**_____

of **(your address)**_____

certify that I am at least 18 years old and that I am voluntarily giving my consent to participate in the experiment entitled:

Australian Athletes' Perceptions of Sport Psychology Services

being conducted at Victoria University of Technology by:
Dr. Mark Andersen
Dr. Jeff Simons
Mr. Greg Harris

I certify that the objectives of the experiment, together with any risks to me associated with the procedures listed hereunder to be carried out in the experiment, have been fully explained to me by:

Greg Harris (via covering letter)

and that I freely consent to participation involving the use on me of these procedures.

Procedures:

Read the instructions carefully at the beginning of the Sport Psychology Attitude Questionnaire (SPAQ) before completing. It is estimated that completion should take between 10 to 15 minutes and it should then be returned to the facilitator overseeing the completion of the questionnaire.

I certify that I have had the opportunity to have any questions answered and that I understand that I can withdraw from this experiment at any time and that this withdrawal will not jeopardise me in any way.

I have been informed that the information I provide will be kept confidential.

Signed: ..... }

Witness other than the experimenter: } **Date:** .....

.....}

Any queries about your participation in this project may be directed to the researcher - (Name: Greg Harris ph.0417 50 25 50). If you have any queries or complaints about the way you have been treated, you may contact the Secretary, University Human Research Ethics Committee, Victoria University of Technology, PO Box 14428 MCMC, Melbourne, 8001 (telephone no: 03-9688 4710).

Appendix C: Athlete Demographic Information

Athlete Information

Athlete Details:

Age:_____

Gender - Male: ☐ Female: ☐

Primary Sport you compete in:_____

Level of competition played at in your Primary Sport:
(tick the appropriate box)

Recreation:	☐	Eg: play irregularly, no formalised competition.
Club:	☐	Eg: play in a structured competition in your local area and/or surrounding suburbs.
State:	☐	Eg: play in tournaments/competition against individuals/ teams from around the state (beyond your local suburb).
National:	☐	Eg: play in tournaments/competition against individuals/ teams from other states.
International:	☐	Eg: play in tournaments/competition against individuals/ teams from other countries.

Years involved: _____

Sport psychology experience:
(tick the appropriate box(es))

None: ☐

Number of workshops attended:	1 - 3:	☐
	4 or more :	☐
Individual consultations attended:	1 - 3:	☐
	3 or more:	☐

Appendix D: Sport Psychology Attitude Questionnaire (SPAQ) used in the Research

SPAQ

Please indicate your level of agreement with each of the following statements by circling a number in the space provided alongside each statement that corresponds to your feelings towards that statement. Please respond to each statement as truthfully as you can.

SD	**D**	**MD**	**N**	**MA**	**A**	**SA**
Strongly Disagree	Disagree	Moderately Disagree	Neutral	Moderately Agree	Agree	Strongly Agree

1. A sport psychology consultant could help me fine tune my sport performance. SD D MD N MA A SA
2. I would work with a sport psychology consultant even though some people might label me a "mental patient". SD D MD N MA A SA
3. I would be most comfortable working with a sport psychology consultant from a racial, ethnic, or cultural group similar to my own. SD D MD N MA A SA
4. A sport psychology consultant does not have the knowledge and skills to help me perform better. SD D MD N MA A SA
5. Working with a sport psychology consultant is bad for an athlete's reputation. SD D MD N MA A SA
6. If I worked with a sport psychology consultant, I would want him/her to have attitudes and values similar to my own. SD D MD N MA A SA
7. I do not have much respect for sport psychology consultants. SD D MD N MA A SA
8. It would not matter to me what my coach thought about my working with a sport psychology consultant. SD D MD N MA A SA
9. If I worked with a sport psychology consultant, I would want him/her to be of the opposite gender. SD D MD N MA A SA
10. I would follow the suggestion a sport psychology consultant gave to me. SD D MD N MA A SA
11. I would prefer working with a sport psychology consultant who has a competitive athletic background similar to my own. SD D MD N MA A SA
12. If my emotional distress was affecting my performance, talking to a sport psychology consultant would be helpful. SD D MD N MA A SA

SD	D	MD	N	MA	A	SA
Strongly Disagree	Disagree	Moderately Disagree	Neutral	Moderately Agree	Agree	Strongly Agree

13. I would work with a sport psychology consultant despite some people's belief that athletes do not need that type of assistance. SD D MD N MA A SA

14. If I were having problems during competition, such as a difficulty with focusing or handling pressure, a sport psychology consultant would be more helpful than a coach or anyone else. SD D MD N MA A SA

15. I would relate best to a sport psychology consultant who is from a socioeconomic level different than my own. SD D MD N MA A SA

16. Considering the time and expense involved in working with a sport psychology consultant, it would have little value for me. SD D MD N MA A SA

17. It would not bother me if people knew I was receiving help from a sport psychology consultant. SD D MD N MA A SA

18. If I worked with a sport psychology consultant, I would want him/her to have a personality similar to mine. SD D MD N MA A SA

19. If a teammate asked my advice about how to become mentally tougher, I would recommend that he/she see a sport psychology consultant. SD D MD N MA A SA

20. If I thought I needed mental training to improve my sport performance, I would get help even if others knew about it. SD D MD N MA A SA

21. If I worked with a sport psychology consultant, I would want him/her to have similar life experiences as I. SD D MD N MA A SA

22. To help me better understand myself as an athlete, I would discuss personal matters with a sport psychology consultant. SD D MD N MA A SA

23. If I worked with a sport psychology consultant, I would not want my teammates to know about it. SD D MD N MA A SA

24. I would respect most the opinions of a sport psychology consultant from my own racial, ethnic, or cultural group. SD D MD N MA A SA

25. If I were worried or upset about my sport performance, I would get help from a sport psychology consultant. SD D MD N MA A SA

Appendix E: Correlation Matrix of SPAQ Items Following Exploratory Factor Analysis

	Item 1	Item 2	Item 3	Item 4	Item 5
Item 1	1.0000				
Item 2	.3571	1.0000			
Item 3	.2025	.1076	1.0000		
Item 4	.2707	.0263	-.0696	1.0000	
Item 5	.2211	.2019	-.0280	.3083	1.0000
Item 6	.1037	-.0854	.1802	-.0395	-.1147
Item 7	.4324	.2513	.0267	.2479	.4088
Item 8	-.0403	.0614	-.1074	.0398	-.0309
Item 9	-.0395	-.1241	-.2446	.2269	.2749
Item 10	.3740	.3291	.1779	.1126	.1619
Item 11	.2441	.0662	.3046	-.1076	.0421
Item 12	.3408	.4287	.1097	.1326	.3543
Item 13	.2522	.3718	.1691	.2142	.3221
Item 14	.4450	.3004	.2587	.0940	.1552
Item 15	-.2134	-.1444	-.3052	.1833	.0440
Item 16	.5432	.2510	.0213	.2513	.2997
Item 17	.2064	.2257	.1441	.0724	.3221
Item 18	.0235	-.1495	.1374	-.0066	-.0987
Item 19	.3977	.1148	.2008	.1023	.2363
Item 20	.2459	.3046	.1380	.1084	.4323
Item 21	.1496	.1744	.2142	-.0861	-.1519
Item 22	.3433	.3772	.2347	.1282	.0917
Item 23	.0130	.0896	-.0356	.1117	.2671
Item 24	.2665	.0877	.4052	-.1718	-.0297
Item 25	.3832	.2146	.1505	.1339	.1894

	Item 6	Item 7	Item 8	Item 9	Item 10
Item 6	1.0000				
Item 7	-.1098	1.0000			
Item 8	.1656	-.0665	1.0000		
Item 9	-.1157	.1637	-.0458	1.0000	
Item 10	-.0265	.2325	.0978	-.0782	1.0000
Item 11	.2071	.0186	-.1654	-.1622	.0893
Item 12	.0121	.3471	.0971	.1012	.3282
Item 13	-.1372	.2218	.0186	.0548	.2076
Item 14	.0730	.2514	.0730	-.1970	.3701
Item 15	-.0324	-.1340	.1062	.1976	-.0808
Item 16	-.1652	.3698	.0300	.1367	.2177
Item 17	-.0439	.2731	.1093	.0724	.3706
Item 18	.4006	-.2061	-.0544	-.2317	-.1175
Item 19	.1288	.2386	-.0910	-.0619	.2200
Item 20	-.0406	.3586	.0040	.1440	.3700
Item 21	.2133	-.0122	-.0631	-.2824	.0736
Item 22	-.1687	.3833	.0675	-.0543	.3423

Item 23	-.0621	.2824	.0868	.2082	.1258
Item 24	.1692	.1545	-.0050	-.2636	.0373
Item 25	.0327	.3334	-.0263	-.0083	.2545

	Item 11	Item 12	Item 13	Item 14	Item 15
Item 11	1.0000				
Item 12	.0707	1.0000			
Item 13	.0187	.3511	1.0000		
Item 14	.2085	.2992	.2325	1.0000	
Item 15	-.1490	-.0295	-.1005	-.2240	1.0000
Item 16	.0773	.3046	.3234	.2953	-.1627
Item 17	-.0291	.3158	.1619	.2313	.0043
Item 18	.2925	-.1077	-.0564	-.0079	-.0033
Item 19	.1192	.2609	.1059	.2397	-.2831
Item 20	.0282	.5296	.2848	.2569	-.0841
Item 21	.2160	-.0079	-.0587	.0226	-.2822
Item 22	-.0327	.4049	.2917	.4060	-.2843
Item 23	-.0303	.1587	.1271	-.0491	.0726
Item 24	.2699	.0312	.0379	.3011	-.4545
Item 25	.1020	.3025	.2456	.4560	-.3143

	Item 16	Item 17	Item 18	Item 19	Item 20
Item 16	1.0000				
Item 17	.1590	1.0000			
Item 18	-.1672	-.1561	1.0000		
Item 19	.2899	.2563	.1137	1.0000	
Item 20	.2195	.4229	-.1855	.2972	1.0000
Item 21	-.0648	-.1351	.3987	.0566	-.1264
Item 22	.3343	.2338	-.2329	.1716	.2946
Item 23	.0158	.3258	-.2238	.0524	.2737
Item 24	.1661	.0073	.1505	.2029	.1208
Item 25	.4247	.2301	-.0402	.4095	.2833

	Item 21	Item 22	Item 23	Item 24	Item 25
Item 21	1.0000				
Item 22	.0284	1.0000			
Item 23	-.2253	.0461	1.0000		
Item 24	.3166	.2393	-.0334	1.0000	
Item 25	.0908	.3501	.1046	.2781	1.0000