New Zealand Athletes' Attitudes Towards Seeking Sport Psychology Consultation

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The aim of this study was to use the Sport Psychology Attitudes-Revised (SPA-R) questionnaire (Martin, Kellman, Lavallee & Page, 2002) to develop an understanding of the attitudes elite New Zealand athletes (N = 112) hold towards sport psychology so that services can be tailored to accommodate these views. The influence of athlete characteristics such as nationality, gender, age, level of competition achieved, and previous use of sport psychology on attitudes was explored. Further, the SPA-R was used as a measure of attitudes within the Theory of Reasoned Action (TRA; Ajzen & Fishbein, 1980) and Theory Planned Behaviour (TPB; Ajzen, 1985, 1991), and integrated with measures of subjective norm and perceived behavioural control to investigate the influence of these variables on predicting athletes' intention to use sport psychology. Results suggested that New Zealand athletes generally held positive attitudes regarding sport psychology, with gender and previous experience of sport psychology significantly influencing attitudes. Regression analyses indicated that the TPB was a better model than the TRA for predicting intention, and the variables predicted 39.7% of variance in intention to use sport psychology. The only SPA-R subscale that contributed significantly was confidence in sport psychology, and perceived behavioural control and subjective norm also contributed significantly. These findings suggest the SPA-R may have limited value in predicting intentions, although the TPB could provide a useful theoretical framework to direct interventions aimed at increasing athletes' intention to use sport psychology.

Within a number of countries, including New Zealand, considerable financial investment has recently been made to establish sport academies and institutes. These institutes have been developed to provide athletes with new opportunities to access the services and facilities they need to train, compete, and win at the highest level (New Zealand Academy of Sport, 2003). These services typically involve sport science, including sport psychology. Sport psychologists help athletes improve their psychological skills with the aim of enhancing well-being and the quality of the sport experience (Vealey, 1994). In New Zealand there are currently 21 sport psychologists who are accredited to practice through the sport science governing body (Sport and Exercise Science New Zealand, 2004).

Despite this growth in service provision, reports on practice suggest that many coaches and athletes remain reluctant to use sport psychology (Gardner, 2001). A number of practitioners have suggested that use of sport psychology will be influenced by the attitudes athletes hold towards the service (e.g., Leffingwell, Rider, & Williams, 2001; Linder, Pillow & Reno, 1989; Ravizza, 1989). Consequently, Martin and colleagues suggested that practitioners should seek to understand athletes' attitudes towards sport psychology so they can tailor their services to best meet the needs of these athletes and increase usage (Martin, Kellman, Lavallee, & Page, 2002; Martin, Wrisberg, Beitel & Lounsbury, 1997).

Using exploratory and confirmatory factor analysis with over 1500 athletes from three countries, Martin et al. (2002) developed the 25-item Sport Psychology Attitudes-Revised (SPA-R) questionnaire to gain insight into athletes' perceptions of sport psychology. The SPA-R has a four-factor solution and was found to be robust and stable across groups and countries. The four factors associated with attitudes towards sport psychology assessed by the SPA-R are: (a) Stigma Tolerance, (b) Confidence in Sport Psychology Consulting, (c) Personal Openness, and (d) Cultural Preference.

The Stigma Tolerance subscale assesses whether athletes believe that others will label them as having psychological problems if they use sport psychology. For example, one item on this scale is 'Seeing a sport psychology consultant is bad for an athlete's reputation'. A high score on this subscale indicates a concern with the stigma of seeing a sport psychologist. Previous research also supports the notion that athletes may be stigmatized for using sport psychology (Leffingwell

et al., 2001; Linder, Brewer, Van Raalte & De Lange, 1991; Linder, Pillow & Reno, 1989). Further research has supported the hypothesis that some groups stigmatize athletes who see a sport psychologist because these groups associate this behaviour with the same stigma they attach to individuals seeking general mental health support (Van Raalte, Brewer, Matheson & Brewer, 1996; Van Raalte, Brewer, Brewer, & Linder, 1992).

The subscale Confidence in Sport Psychology Consulting assesses athletes' beliefs about the usefulness of sport psychology and mental training. For example, one item on this subscale is 'A sport psychology consultant could help me fine tune my sport performance', and a high score on this scale indicates high confidence in sport psychology. Bull (1991) also noted that athletes might be somewhat sceptical about the usefulness of sport psychology and this would influence their use of the service.

The Personal Openness subscale measures interpersonal openness to try sport psychology. Interpersonal openness is a condition in which individuals are willing and able to discuss problems or concerns with others (Martin et al., 1997). For example, one item on this subscale is 'I resent anybody who wants to know about my personal difficulties', and a high score on this subscale indicates a *lack* of personal openness. Other practitioners have noted that if athletes are unwilling to share personal information then this will be a barrier to use of sport psychology (Donohue, et al., 2004)

The final subscale, Cultural Preference, measures the degree to which athletes identify with their own culture and have a preference for working with a consultant of the same cultural background. An example item on this subscale is 'I would be more comfortable with a sport psychology consultant if he/she were the same ethnic origin as me', and a high score on this scale relates to a strong cultural preference. Previous research has found that some individuals prefer instructors, counsellors, and coaches who are ethnically and racially similar to their own perceived identity (e.g., Anshel, 1990).

Martin et al. (2002) have suggested that using the SPA-R could help practitioners determine whether athletes are interested in learning mental skills, receptive to sport psychology, confident in the consultant's abilities, and tolerant of the consultant's personal characteristics. Subsequently, the sport psychologist could tailor their approach to best fit the features of the client. Furthermore, we suggest that within sport institutes and academies it would be useful for managers to develop an understanding of athletes' beliefs and attitudes towards sport psychology to help direct and market service provision, and explain athletes' level of involvement in sport psychology support (Bull, 1991; Leffingwell et al., 2001).

Martin et al. (2002) have also called for future researchers to explore how athlete characteristics such as nationality, gender, age, competitive level, and previous experience of sport psychology may influence attitudes towards sport psychology. These client characteristics could have implication for how a sport psychologist may work with a specific group. Cross-cultural differences in seeking professional help are evident within counselling (Furnham & Andrew, 1996), so differences between athletes from different countries on their attitudes towards sport psychology may also be evident (Martin, Lavallee, Kellman & Page, 2004). To date no previous administration of the SPA-R in New Zealand has been found, although Sullivan and Hodge (1991) did survey New Zealand coaches (n = 46) and athletes (n = 68) regarding their general perceptions of sport psychology and found that the athletes rated sport psychology as important. Further research using the SPA-R would be useful to provide a more precise and up-to-date picture of elite New Zealand athletes' attitudes towards sport psychology, and consider the influence of nationality on SPA-R scores by comparing the results with athletes from different countries.

Research has consistently indicated that women are more willing to seek psychological help than men (Johnson, 1988) and this finding has also been evident in sport psychology (Martin et al., 2001). Research in counselling psychology has indicated that adolescents (aged 19 or less) may be resistant to seeking psychological help (e.g., Raviv, Sills, Raviv & Wilansky, 2000) but limited research has considered the influence of age on attitudes towards using sport psychology. Competitive level may influence athletes' attitudes towards sport psychology because higher level athletes may have had greater exposure to and developed an awareness of the role of psychology in high level sport, resulting in a more positive attitude (Martin & Boone, 1996). Finally previous exposure to sport psychology, especially if the experience was positive, is likely to lead to more positive attitude towards sport psychology (Martin et al., 2004)

To date research assessing athletes' attitudes to sport psychology has been predominantly descriptive with intuitive discussion of how these attitudes influence subsequent behaviour related to sport psychology. Martin et al. (2002) suggested that future research should focus on increasing understanding of the meaning and implications of these attitudes for athletes. An examination of the relationship between athletes' attitudes and their subsequent intentions and behaviour regarding sport psychology would be of particular interest for sport psychology practitioners. The Theory of Reasoned Action (TRA; Ajzen & Fishbein, 1980) and the Theory of Planned Behaviour (TPB; Ajzen, 1985, 1991) offer theoretical models imminently suitable for an investigation of the relationship between attitudes towards sport psychology and intention to use sport psychology services.

In formulating TRA, Ajzen and Fishbein (1980) suggested that intentions to engage in a behaviour are the most immediate and powerful determinants of that behaviour. Further, intentions are influenced by the individual's attitude towards the behaviour and subjective norm. The attitude that athletes hold towards sport psychology will affect their intention to actually use sport psychology. For example, a hockey player may believe that seeing a sport psychologist will help improve her mental toughness and that this is a valuable outcome. This positive

attitude towards the target behaviour will strengthen the hockey player's intention to seek sport psychology support. Subjective norm is defined as the perceived social pressure to engage or not engage in a specific behaviour (Ajzen, 2002). In forming these perceptions individuals take into account the normative expectations of various important others in her environment (e.g., coach, parent, team-mates, partner, and friends) and the value they place on these expectations. For example in forming a perception of subjective norm, a hockey player may take into account the fact that her coach approves of athletes using a sport psychologist and that she values her coach's opinion on this matter. This perception should consequently strengthen the athlete's intention to use a sport psychologist.

From the TRA, Ajzen (1985, 1991) proposed the TPB by incorporating a measure of perceived behavioural control. Perceived behavioural control is a person's belief in their ability and control to execute a behaviour (Ajzen, 2002), and was added to the model to help explain intentions and behaviour in situations where volitional control may be challenged. Perceived behavioural control is hypothesized to influence behaviour directly and indirectly, through its influence on intention. For example, an athlete may believe that she cannot consult with a sport psychologist because she is unaware of any sport psychologist available within her geographical location. Consequently, this will influence her intention to use sport psychology and actual use of sport psychology. Perceived behavioural control will only directly predict behaviour when perceived control approximates actual control. Both the TRA and TPB have been used with some success to understand and predict physical activity behaviour (e.g., Godin, 1993; Hagger, Chatzisarantis & Biddle, 2002) and fitness training adherence (e.g., Mummery & Wankel, 1999) and may provide some insight into the influence of athletes' attitudes towards sport psychology and provide guidance for interventions to increase usage.

The aim of this study was firstly to use the SPA-R to collect data on New Zealand athletes' attitudes towards sport psychology and to compare these findings with previous results to increase practitioner's knowledge of their client base. Secondly, as discussed earlier certain athlete characteristics may influence attitudes towards sport psychology so the affect of these characteristics was examined. Specifically it was hypothesised that: (H1) female athletes would have more positive attitudes towards sport psychology than male athletes; (H2) athletes aged 20 and over would have more positive attitudes towards sport psychology than athletes aged 19 and under; (H3) athletes competing at a higher competitive level will have more positive attitude towards sport psychology than those competing at a lower level; and (H4) athletes who had previously used sport psychology would hold more positive attitudes towards sport psychology than athletes who had not used sport psychology. Thirdly, the SPA-R scores were used as a measure of participants' attitudes towards sport psychology within the TRA and TPB models to investigate the influence of attitudes and other variables on athlete's intention to use sport psychology.

Method

Participants

A sample of 112 athletes (*M* age = 23.9; *SD* = 8.1) including 107 European New Zealanders (male n = 49; female n = 58), 3 Maori New Zealanders (male n = 2; female n = 1), 1 Pacific New Zealander (male n = 1) and 1 man of undisclosed origin from the New Zealand Academy of Sport volunteered to participate in this study. The sample included 39 athletes who were younger than 20 years old who were classified as adolescents and 73 athletes who were 20 years old or older, who were classified as adults. Highest level of competition achieved was determined through the Academy's card classification system: the athletes were classified as World class (male n = 8; female n = 16), International (male n = 10; female n = 6) Developmental (male n = 12; female n = 17), or Junior (male n = 15; female n = 13), and 15 athletes did not classify themselves. The participants were from a range of 24 sports including hockey, cricket, rowing, and swimming, and had an average of 10.9 (*SD* = 6.7) year's participation in their sport. The majority of the participants, 65%, had used sport psychology at least once before (male n = 32; female n = 41) and 35% had not used sport psychology previously (male n = 21; female n = 18).

Procedure and Questionnaire

All athletes in the South Island who had been selected for the New Zealand Academy of Sport (N = 250) received the questionnaire, instructions, informed consent forms, and a stamped addressed envelope as part of a standard mail out from the Academy of Sport. Participants were invited to anonymously complete and return the questionnaire. The decision to allow the athletes to complete the questionnaire anonymously was made to increase the honesty and number of the responses. As a consequence, it was not possible to collect data relating to actual sport psychology consulting behaviour. The response rate was 45%.

The questionnaire contained the Sport Psychology Attitudes - revised form, which has established reliability and validity (Martin et al., 2002). In this study, the internal consistency estimates for the 7-item Stigma Tolerance (α = .83), 8-item Confidence in Sport Psychology Consulting (α = .84), 6-item Personal Openness (α = .64), and 4-item Cultural Preference (α = .66) subscales were all consistent with previous findings. Although the internal consistency estimates for the subscales Personal Openness and Culture Preference subscales did not reach the generally recommended .70 , Martin et al. (2002) suggested these could be viewed as tolerable because each scale had a small number of items, had good test-retest reliability, and the overall model had a robust factor structure. The responses to items on each sub-scale were averaged to provide four measures of attitude within a range of 1 (strongly disagree) to 7 (strongly agree).

The Intention, Subjective Norm, and Perceived Behavioural Control subscales were developed following the recommendations of Ajzen and Fishbein (1980) and Ajzen (2002) and had a 7-point scale anchored at each end of the scale by *strongly agree* and *strongly disagree*. Four questions were included on the questionnaire to assess

each athlete's intention to use sport psychology services in the next 12 months. All questions were posed in a form similar to 'I intend to use sport psychology services through the Academy of Sport in the next 12 months'. The internal consistency coefficient for this scale was .94 and the items were averaged to provide a measure of intention.

Two items were included in the questionnaire to assess subjective norm. These statements were 'Most people who are important to me think I should access and use sport psychology services through the Academy of Sport in the next 12 months' and 'People who are important to me in my sport want me to make use of the sport psychology services available through the Academy of Sport in the next 12 months'. The internal consistency coefficient for this scale was .73 and the items were averaged to provide a measure of subjective norm.

A measure of perceived behavioural control was obtained by taking the mean of the responses to four items assessing respondents' perceptions of their ability to access and use sport psychology services in the next 12 months. The items were posed in the form similar to 'If I wanted to I could easily access and use sport psychology services through the Academy of Sport in the next 12 months'. The internal consistency coefficient for this scale was .81 and the items were averaged to provide a measure of perceived behavioural control.

In addition to the measures related to the theory of planned behaviour, items were included regarding participants' sport, years of involvement in their sport, age, gender, race, and previous experience of sport psychology. The questionnaire was pilot tested with athletes representative of the target population, and further feedback on the format and content was received from a group of academic sport psychologists. Minimal changes were made to the questionnaire.

Data Analysis

Descriptive data for each of the measures were calculated. In order to compare results from the New Zealand athletes with data collected by Martin et al. (2004) from athletes of the same competitive level (M age = 20.57; SD = 2.42) from the United States (n = 404), United Kingdom (n =147) and Germany (n = 260) a series of planned comparisons using independent group t-tests with Bonferroni corrections were undertaken and effect sizes calculated using Cohen's d (Cohen, 1977). Consistent with previous research (e.g., Martins et al., 1997), Multivariate Analysis of Variance (MANOVA) with uni-variate analyses and post-hoc Tukey tests, if appropriate, were undertaken to explore the influence of gender, age, competition level achieved, and previous use of sport psychology on athletes' attitudes towards sport psychology. In order to guard against error rates in the calculations and follow-up tests, a ratio of at least three participants to each dependent variable was adhered to (Ntoumanis, 2001) and Bonferroni adjustments were applied to the calculation of significance in follow-up univariate tests (Giles, 2002). Consistent with previous research examining TRA and TPB (e.g., Ajzen & Driver, 1992), hierarchical multiple regression analysis was undertaken to firstly examine the influence of attitudes and subjective norm on intention to use sport psychology, and then as a test of the TPB, perceived behavioural control was added to the regression equation.

Results

Descriptive Data

Descriptive data for the SPA-R, and measures related to the TRA and TPB were calculated. The results indicated that the attitudes towards sport psychology were generally positive (i.e., Stigma Tolerance M = 2.00, SD = 0.8 and lack of Personal Openness M = 3.7, SD = 1.1 where a low score indicates positive attitude; Confidence in Sport Psychology Consulting M = 5.2, SD = 0.9 where a high score represents a positive attitude) and the athletes expressed some preference to working with a sport psychologist with the same cultural background (Cultural Preference M = 3.9, SD = 1.0 where a high score represents a high cultural preference). These athletes also reported that they intended to use sport psychology (Intention M = 5.4, SD = 1.5), perceived a high level of control over this behaviour (Perceived Behavioural Control M = 5.7, SD = 1.4), and perceived a high level of support from important others to engage in the behaviour (Subjective Norm M = 6.3, SD = 1.4).

Table 1. Results of T-Test Analyses and Effect Size Calculations Comparing New Zealand with United Kingdom, United States, and German athletes

Scale	Country													
	New Zealand (n = 112)		United Kingdom (n = 147)				United States (n = 404)				Germany (n = 260)			
	Mean	*SD*	*Mean*	*SD*	*t*	*d*	*Mean*	*SD*	*t*	*d*	*Mean*	*SD*	*t*	*d*
Stigma Tolerance	2.00	0.8	2.49	0.8	4.88**	0.61	2.76	1.0	7.41**	0.76	2.49	0.9	4.97**	0.54
(Lack of) Personal Openness	3.70	1.1	4.33	0.9	5.06**	0.70	4.42	0.9	7.12**	0.80	4.21	0.9	4.67**	0.57
Cultural Preference	3.92	1.00	2.66	1.2	8.98**	-1.05	3.47	1.3	3.39*	-0.35	3.08	1.3	6.10**	-0.65
Confidence in Sport Psychology Consulting	5.23	0.9	4.69	0.9	4.78**	-0.60	4.63	1.0	5.73**	-0.60	4.38	1.0	7.74**	-0.85

Note. *p<.01, ** p<.001

Comparison with Previous Research

A series of independent group t-tests with Bonferroni corrections revealed that New Zealand athletes scored significantly lower than the United States, United Kingdom and German samples on the lack of Personal Openness and Stigma Tolerance subscales, and significantly higher on the Cultural Preference and Confidence in Sport Psychology Consulting subscales (see Table 1). Through examination of the effect sizes, all of the differences were deemed to be moderately or highly meaningful (Cohen, 1977), except for the difference between the United States and New Zealand athletes on the Cultural Preference subscale.

Influence of Athlete Characteristics on Attitudes

Gender. Table 2 illustrates the scores for men and women for each subscale. MANOVA indicated a significant main effect for gender on SPA-R scores (Wilk's lambda = .85, $F(4, 91) = 3.97$, $p<.001$, $\eta^2=.15$). Follow-up univariate analyses, with Bonferroni adjustment, indicated that women scored significantly lower on lack of Personal Openness ($F(1, 94) = 9.06$, $p<.001$, $\eta^2=.09$) and higher on Confidence in Sport Psychology Consulting ($F(1, 94) = 7.14$, $p<.001$. $\eta^2=.07$) subscales than men.

Seen a sport psychologist previously. Table 2 also illustrates the scores on each subscale for those athletes who had and had not previously seen a sport psychologist. MANOVA results indicated a main effect for previous contact (Wilk's lambda = .74, $F(4, 91) = 7.72$, $p<.01$, $\eta^2=.26$). Follow-up univariate analyses indicated that those who had previously used a sport psychologist scored higher on the subscale Confidence in Sport Psychology Consulting ($F(1, 94) = 23.7$; $p<.001$, $\eta^2=.20$) and lower on the subscale Stigma Tolerance ($F(1, 94) = 14.3$; $p<.001$, $\eta^2=.13$) than those who had not previously used a sport psychologist.

Table 2. Mean and Standard Deviation Scores for the SPA-R Subscales by Gender and Previous Use of Sport Psychology

Scale	Gender				Used sport psychology before			
	Males		Females		No		Yes	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Stigma Tolerance	2.01	0.73	1.98	0.86	2.34	0.91	1.85**	0.69
(Lack of) Personal Openness	3.95	1.16	3.42**	0.92	3.93	1.09	3.53	1.15
Confidence in Sport Psychology Consulting	5.01	0.88	5.40**	0.82	4.74	0.81	5.26**	0.89
Cultural Preference	3.89	1.00	3.94	0.97	4.10	0.99	3.89	0.93

Note. ** p<.001

Competition level achieved. Table 3 illustrates the scores for each card classification level on each subscale. MANOVA indicated there was no main effect for level achieved on attitudes towards sport psychology (Wilk's lambda = .80, $F(4, 91) = 1.45$, $p=.15$, $\eta^2=.07$).

Age. Table 3 also illustrates the scores for athletes 19 and under (n=39) and athletes 20 and older (n=73) for each subscale. MANOVA indicated there was no main effect for age on attitudes towards sport psychology (Wilk's lambda = .91, $F(4, 91) = 2.15$, $p=.08$, $\eta^2=.09$).

Prediction of Intention to use Sport Psychology

A two-step hierarchical multiple regression analysis was performed to test the predictions of the TRA and TPB. A Pearson correlation matrix of all independent variables was examined for the possibility of multi-collinearity in the data, and no correlations above 0.9 were evidenced. Although the sample size was sufficient, it was recognized as small and therefore missing data was replaced by the variable mean (Ntoumanis, 2001). The first step, which involved regressing the intention measure on each of the attitude subscales and subjective norm, constituted a test of the TRA. Adding the measure of perceived behavioural control onto the second step enabled a comparison between TRA and TPB.

As outlined in Table 4, the first step of the analysis accounted for 36.4% of the variance in intention and this model was significant ($F(5, 106) = 13.70$; $p < .01$). However, only Confidence in Sport Psychology Consulting and Subjective Norm subscales independently contributed significantly to the prediction of Intention. Adding Perceived Behavioural Control in the second step of the analysis significantly increased the amount of variance accounted for to 39.7% (change statistic $F(1, 105) = 4.61$; $p < .05$) and this model

Table 3. Mean and Standard Deviation Scores for the SPA-R Subscales by Classification/Card Level and Age

Scale	Academy Classification								Age			
	World class		International		Develop'tal		Junior		Up to 19yrs		20+yrs	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Stigma Tolerance	1.73	0.77	2.15	1.02	1.79	0.67	2.35	0.80	2.25	0.92	1.85	0.69
(Lack of) Personal Openness	3.42	0.96	3.92	1.01	3.34	1.10	3.99	0.93	3.94	0.85	3.53	1.15
Confidence in Sport Psychology Consulting	5.21	0.99	5.21	0.90	5.43	0.76	4.99	0.70	5.16	0.84	5.26	0.89
Cultural Preference	3.95	0.99	4.05	1.19	3.93	1.16	3.78	0.82	3.97	1.09	3.89	0.93

was also significant ($F(6, 105) = 12.57$; $p < .01$). Within this model Confidence in Sport Psychology Consulting, Subjective Norm, and Perceived Behavioural Control all independently contributed significantly to the prediction of intention.

Table 4. Summary of Hierarchical Regressions to Test Ability of TRA and TPB to Predict Intention to use Sport Psychology

Variable	*b*	*R*	*Adj R²*
Step 1		.627	.364**
Stigma Tolerance	-.093		
Confidence in Sport Psychology Consulting	.258**		
(Lack of) Personal Openness	-.051		
Cultural Preference	.003		
Subjective Norm	.412**		
Step 2		.647	.385
Perceived Behavioural Control	.170*		

Note. * p<.05; ** p<.01

Discussion

The results of the SPA-R questionnaire suggest that the New Zealand athletes in this study are confident in sport psychology, generally open to using sport psychology and identify with their culture, and possibly would prefer to work with a consultant from the same background. Further, Martin et al. (2002) suggested a mean score of over 5 on the Stigma Tolerance scale would indicate a negative attitude, and New Zealand athletes averaged only 2.00. This result suggests that these New Zealand athletes did not perceive a stigma associated with working with a sport psychologist, which is contrary to Leffingwell et al. (2002) who found that athletes from the United States reported fear of being stigmatized as a primary reason for not seeking sport psychology support. Comparison of the results from this present sample with mean data collected by Martin et al. (2004) revealed that these New Zealand athletes had a more positive attitude towards sport psychology as evidenced by significantly lower average scores than United States, British, and German athletes on lack of Personal Openness and Stigma Tolerance, and higher score on Confidence in Sport Psychology Consulting. The New Zealand athletes also scored highest on Cultural Preference suggesting that they most strongly identified with their own culture, and expressed greatest preference for working with a sport psychologist from their own background. The differences between the New Zealand athletes and other nationalities were all judged as meaningful as evidenced by effect sizes greater than .5, except for the difference between New Zealand and United States athletes on the Cultural Preference subscale. These findings are encouraging for practitioners and for the sport academies in New Zealand as they support previous research that suggested New Zealand athletes have a positive attitude towards sport psychology and would be open to receiving psychological support (Sullivan & Hodge, 1991). This finding would suggest that the provision of sport psychology within the Academies of Sport is likely to be worthwhile. However, it should be noted that the response rate of 45% may have resulted in a biased sample who are more interested in sport psychology than the non-respondents, thus perhaps presenting an over optimistic view of New Zealand athletes' attitudes towards sport psychology (Thomas & Nelson, 2001).

Consideration of the influence of client characteristics on attitudes indicated that female athletes were more open than male athletes to partaking in sport psychology and were more confident than male athletes in the usefulness of sport psychology. These findings support Hypothesis 1, and previous research that has also demonstrated that women generally have a more positive attitude towards sport psychology (Martin et al., 2001) and seeking psychological help in general (Johnson, 1988). Others have suggested that this gender difference may be explained by male athletes' socialization experiences, which have made it less acceptable to discuss personal problems or admit vulnerability. For example, Yambor and Connelly (1991) highlighted the emphasis on maintaining a "macho" image in male sport, which may further socialize male athletes away from discussion of personal issues and seeking help. The consistency of this gender difference in attitudes towards sport psychology suggests that practitioners should consider adopting different approaches when working with male or female athletes. Specifically, with male athletes the practitioner may need to spend more time on educational sessions highlighting the benefits of sport psychology and dispelling any myths.

In this study, age and competitive level achieved did not significantly influence athletes' attitudes towards seeking sport psychology assistance. Specifically, athletes who were 19 years or younger did not have significantly different attitudes from athletes who were 20 years or over. This finding does not support Hypothesis 2 and is contrary to previous non-sport research that suggests adolescents can be resistant to seeking psychological help (e.g., Raviv et al., 2000). Further, there was no difference in attitudes between athletes who were classified as World Class, International, Developmental, or Junior. This is also contrary to the hypothesised relationship (Hypothesis 3) based on the findings of previous research that found more successful athletes (e.g., United States NCAA Division 1 football players) held more positive attitudes towards sport psychology than their less successful counterparts (Martin & Boone, 1996).

Whether an athlete had previously worked with a sport psychologist was influential on attitudes towards sport psychology, supporting Hypothesis 4. Athletes who had worked with a sport psychologist at least once generally had greater confidence in sport psychology and perceived less of a stigma associated with sport psychology than

athletes who had not previously worked with a sport psychologist. It is encouraging that the experience of working with sport psychologists was associated with more positive attitudes towards sport psychology. However, it is not possible to discern from the current data whether these positive attitudes influenced the athletes' decision to see a sport psychologist, or whether the positive attitudes were a consequence of working with a sport psychologist. Longitudinal research monitoring athletes' attitudes over time would be useful to explore this further.

Whilst it is of interest to have descriptive data on athletes' attitudes towards sport psychology, the implications these attitudes have for service delivery will likely be of most interest to the practitioner. The findings of this study support using the Theories of Reasoned Action and Planned Behaviour (Ajzen, 1985, 1991; Ajzen & Fishbein, 1980) as theoretical frameworks for understanding the role of attitudes and other variables on determining intention to use sport psychology. The variables of the TRA predicted 38% of intention to use sport psychology, with the subscales Confidence in Sport Psychology Consulting and Subjective Norm contributing significantly. However, the TPB provided a better model for predicting intention, with Confidence in Sport Psychology Consulting, Subjective Norm, and Perceived Behavioural Control all significant independent predictors and accounting for nearly 40% of variance in intention. There is a lack of research using the TRA and TPB in applied sport psychology to judge these finding against; however, these results are comparable with results from exercise psychology. For example, in a review paper Godin (1993) suggested that attitude and subjective norm could account for 30% variance in intention to exercise and the addition of perceived behavioural control would add 4-20% extra variance.

These results lend some support to Martin et al.'s (2002) recommendation that practitioners should assess athletes' attitudes to gain useful information on the characteristics of potential clients, and specifically their intention to use sport psychology. However, the findings indicated that the subscale Confidence in Sport Psychology Consulting was the only significant predictor of intention from the SPA-R. The Stigma Tolerance, lack of Personal Openness and Cultural Preference subscales did not significantly predict intention to use sport psychology, although this could have been influenced by the low internal reliability of the lack of Personal Openness and Cultural Preference subscales. Nevertheless, it may be hypothesized that practitioners need only use the Confidence in Sport Psychology Consulting subscale to collect pertinent information on intention. Further, interventions targeting attitude change (e.g., modelling and persuasive communication) may be particularly useful for practitioners, institutes and academies aiming to increase intention to use sport psychology.

Subjective norm was also significant in predicting behavioural intention. This finding is contrary to the general findings of TRA/TPB research with adults in exercise psychology where subjective norm has not been found to be an important predictor of intention to exercise (e.g., Godin, 1993). Ajzen (1991) noted that the relative importance of each of the variables in the TPB is likely to vary across situations. The findings of this study suggest that these elite New Zealand athletes were influenced by important others in their decisions regarding intention to use sport psychology. Consequently, a supportive coach, team, and family environment appear to be important in determining whether an athlete would intend to use sport psychology. In line with the TPB, perceived behavioural control significantly predicted intention and its inclusion lead to a significantly better prediction of intention than with the TRA. This finding suggests that athletes' intention to use sport psychology is influenced by how confident they are that they will be able to overcome barriers and access the service. To increase usage of sport psychology, institutes and academies may look to ensure that potential barriers such as time, money, and access to consultants are addressed.

In this study the SPA-R provided a measure of attitudes and was integrated into the TPB model. However, the SPA-R was not developed specifically to assess attitudes within TPB research, and therefore does not fulfil all of the recommendations for research of this nature. For example, Ajzen (2002) recommended that the behaviour of interest should be defined in terms of target, actions, context, and time (e.g., access and use sport psychology services through the Academy of Sport in the next 12 months) and that all constructs should observe the principle of compatibility and be defined in terms of exactly the same elements. In this study the attitude items were not specifically directed to a specific behaviour but measured a more general construct, nor were the responses on a semantic differential scale. Future research could modify items in the SPA-R to increase compatibility, and this may further increase the predictive value of the model. Additionally, research incorporating both the SPA-R and an instrument developed following Ajzen's guidelines would be of interest to compare the value of each for predicting intention and actual use of sport psychology.

In summary, this research replicated and extended previous work investigating athletes' attitudes towards sport psychology. The findings provide insight into the attitudes of New Zealand athletes and suggest that they have a positive attitude towards using sport psychology and compare favourably against athletes from other countries. These findings suggest that New Zealand athletes are not likely to be resistant to practitioners and sport academies offering sport psychology services. However, male athletes and those who have not previously used sport psychology may have a less positive attitude towards sport psychology, and practitioners should tailor interventions accordingly. Finally, the results suggest that only the Confidence in Sport Psychology Consulting subscale of the SPA-R assesses attitudes influential on intention to use sport psychology, therefore the SPA-R in its entirety may have limited value for predicting intentions. Subjective norm and perceived behavioural control were also

influential on intention to use sport psychology, indicating that the TPB could offer a useful theoretical basis for interventions aimed at increasing intention to use of sport psychology. Further research on the predictors of actual use of sport psychology is required.

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