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Attitudes towards sport psychology consulting in athletes: Understanding the role of culture  
and personality

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1 Attitudes towards sport psychology consulting in athletes: Understanding the role of  
2 personality and culture

3 Despite the widespread acknowledgement that mental factors play a crucial role in  
4 sporting success (Connaughton, Wadey, Hanton, & Jones, 2008; Gould & Maynard, 2009;  
5 Greenleaf, Gould, & Dieffenbach, 2001), there still exists degrees of resistance among  
6 athletes towards sport psychology consulting (Karageorghis & Terry, 2011; Kremer &  
7 Moran, 2012). It has been suggested by Ravizza (2001) that as a general rule of thumb,  
8 approximately one-third of athletes are not receptive to sport psychology consulting, one-  
9 third are indifferent, and only one-third are interested. Similarly, Green, Morgan and Manley  
10 (2012) found that even though most elite rugby league players agreed that sport psychology  
11 was important, many of them were reluctant to engage the help of a sport psychology  
12 consultant due to the fear of being judged by coaches and teammates. In view of the  
13 perceived resistance that exists towards sport psychology, Martin, Wrisberg, Beitel, and  
14 Lounsbury (1997) stated that research needed to be geared towards understanding the  
15 attitudes that athletes have towards sport psychology consulting, and investigate the factors  
16 that could potentially influence those attitudes. This line of enquiry would serve to inform  
17 how sport psychology consultants could make sport psychology more accessible and  
18 attractive to athletes, and also allow them to devise strategies to target athletes who may not  
19 be receptive to sport psychology (Martin et al., 1997).

## 20 **Previous Literature on Sport Psychology Attitudes**

21 In view of these observations, research has been conducted to determine the main  
22 factors that are involved in athletes' attitudes towards sport psychology consulting (Martin,  
23 Kellmann, Lavallee, & Page, 2002). The first factor is *stigma tolerance*, which is the belief  
24 that athletes will be viewed negatively if they engage the help of a sport psychology  
25 consultant (Martin et al., 2002). This factor has a long history of support, with Ravizza

1 (1988) stating that the negative connotation of sport psychology was the most significant  
2 barrier facing sport psychology consultants. The second factor is *confidence in sport*  
3 *psychology consulting*, which is the belief that sport psychology is actually helpful and will  
4 benefit the athletes who engage with the process (Martin et al., 2002). Pain and Harwood  
5 (2004) found that it is difficult for sport psychology consultants to quantify the impact of  
6 their services, and this could cause athletes to be skeptical as to whether sport psychology can  
7 truly help to improve their sporting performance. The third factor is *personal openness*,  
8 which is the willingness of athletes to engage in sport psychology consulting (Martin et al.,  
9 2002). Wrisberg, Simpson, Loberg, Withycombe, and Reed (2009) found that athletes who  
10 had perceived past sport psychology experiences to be effective were more open to future  
11 consultation, while the opposite was true for athletes who had negative past experiences. The  
12 fourth factor is *cultural preference*, which is the preference of athletes to work with a  
13 consultant who is from the same culture and background (Martin et al., 2002). Lubker, Visek,  
14 Watson, and Singpurwalla (2012) supported this assertion when they found that a  
15 consultant's race was one of the factors that influenced an athlete's attitude towards the  
16 consultant.

17         After identifying various components that were involved in athletes' sport psychology  
18 attitudes, Martin, Zakrajsek, and Wrisberg (2012) created a framework known as the  
19 Multidimensional Model of Sport Psychology Service Provision (M<sup>2</sup>SP<sup>2</sup>), which sought to  
20 illustrate the process by which athletes' attitudes towards sport psychology consulting are  
21 formed. In their model, they highlight various personal and situational factors that contribute  
22 to athletes' receptivity towards sport psychology consulting. Firstly, there is a significant  
23 amount of evidence to suggest that males are less receptive to sport psychology consulting  
24 than females (Anderson, Hodge, Lavalley, & Martin, 2004; Martin, 2005; Martin et al., 1997;  
25 Martin, Lavalley, Kellmann, and Page, 2004; Wrisberg et al., 2009). It has been found that

1 male athletes are more likely to stigmatise sport psychology consulting, have less confidence  
2 in sport psychology consulting, have less personal openness towards sport psychology, and  
3 prefer working with a consultant of the same race or ethnicity than female athletes (Anderson  
4 et al., 2004; Martin, 2005; Martin et al., 1997, 2004). A common explanation given for this  
5 observation is that social norms and cultural stereotypes dictate that male athletes should be  
6 tough and masculine, and should not exhibit or disclose any emotional problems (Yambor &  
7 Connelly, 1991). The type of sport that athletes engage in has also been found to influence  
8 their attitudes towards sport psychology consulting. Martin (2005) found that athletes who  
9 played physical contact sports found sport psychology to be more stigmatising than non-  
10 contact sport athletes. The explanation given for this finding was that athletes who  
11 participated in physical contact sports are socialised to accept the pain and hurt that comes  
12 with the sport, and are not as willing to seek help as non-contact sport athletes (Martin, 2005;  
13 Vogel, Wade, & Hackler, 2007). There is also evidence to suggest that an athlete's previous  
14 sport psychology experience can affect their subsequent attitudes towards sport psychology  
15 consulting (Anderson et al., 2004; Martin, 2005; Martin et al., 2004). It has also been found  
16 that effective past sport psychology consulting experiences were related to positive sport  
17 psychology attitudes in the athletes, while ineffective past experiences were related to  
18 negative sport psychology attitudes (Wrisberg et al., 2009).

19 Culture and ethnicity have also been found to be significantly related to athletes'  
20 attitudes towards sport psychology consulting. In one study, Martin et al. (2004) sought to  
21 investigate the sport psychology attitudes of American, British, and German athletes. They  
22 found several differences between athletes from the three nations, with American athletes  
23 more likely to stigmatise sport psychology consulting than British and German athletes; and  
24 British athletes being more confident in sport psychology consulting, and identifying more  
25 with consultants of similar culture than American and German athletes. Similar studies were

1 conducted with athletes from New Zealand (Anderson et al., 2004) and Ireland (Lavalley,  
2 Jennings, Anderson, & Martin, 2005), and it was found that athletes from both countries had  
3 positive attitudes towards sport psychology, and were open to engaging in sport psychology  
4 consulting.

5 A notable trend in the body of literature reflects how the vast majority of research  
6 done on athletes' sport psychology attitudes has been conducted in Western countries such as  
7 the United States, United Kingdom, Germany (Martin et al., 2004), New Zealand (Anderson  
8 et al., 2004), and Ireland (Lavalley et al., 2005); and there is very limited research that has  
9 been conducted in an Eastern context. This is a significant gap in literature, and several  
10 researchers (Anderson et al., 2004; Lavalley et al., 2005; Martin et al., 2004) have called for  
11 future research to explore the cultural differences that may exist between athletes from  
12 Eastern and Western cultures. One study that has been previously conducted in an Eastern  
13 context was by Naoi, Watson, Deaner, and Sato (2011), who found that Japanese athletes had  
14 a greater interest in receiving sport psychology help than American athletes, but were also  
15 less open to talking about personal issues, and preferred to work with a sport psychology  
16 consultant of the same race. However, one important limitation of the study was that it used a  
17 self-developed scale to measure sport psychology attitudes, and the scale did not have  
18 evidence for score validity or reliability demonstrated. It is worth noting here that the Sport  
19 Psychology Attitudes–Revised (SPA-R) questionnaire (Martin et al., 2002) has undergone  
20 more systematic evaluation of score validity and reliability.

21 At this juncture, we must highlight that even though previous researchers advocate  
22 comparisons between athletes from Eastern and Western cultures, this form of grouping  
23 strategy might in fact be too broad (Andersen, 1993). Therefore, the recommendation might  
24 be to narrow the comparison down to the main nationalities examined in this study (i.e.,  
25 British vs Singaporean), in order to understand the fine nuances and unique characteristics

1 that might exist in those specific groups. This is in line with current research in cultural sport  
2 psychology (McGannon & Johnson, 2009; Ryba, Stambulova, Si, & Schinke, 2013; Schinke,  
3 McGannon, Parham, & Lane, 2012), which advocates the need to capture the complexity and  
4 context of each specific culture group, so as to gain an accurate view of that particular group.

### 5 **Relationships between Personality and Help-Seeking Attitudes**

6         Despite previous efforts to investigate athletes' attitudes towards sport psychology  
7 consulting, one important factor that has yet to be explored is the personality of the athlete.  
8 Several researchers (Lavallee et al., 2005; Martin, 2005; Martin et al., 2004) have suggested  
9 that future research be conducted to explore how personality could affect sport psychology  
10 attitudes in athletes. While there has been a lack of research done in the area of sport  
11 psychology, there has been a significant amount of research done in counseling and help-  
12 seeking settings to suggest that personality could potentially affect sport psychology attitudes  
13 (Atik & Yalcin, 2011; Kakhnovets, 2011; Seekles et al., 2012). A review of literature reveals  
14 that the vast majority of studies in this area have utilized the Five Factor Model (FFM) as the  
15 personality measure of choice (Friedman, Veazie, Chapman, Manning, & Duberstein, 2013;  
16 Klockner & Hicks, 2008; Tsan & Day, 2007; etc.). The FFM stipulates that there are five  
17 main dimensions of personality known as the Big Five personality traits, which comprise of  
18 extraversion, neuroticism, agreeableness, conscientiousness, and openness (McCrae & John,  
19 1992). Extraversion is characterised by outgoingness and sociability; neuroticism by  
20 emotional instability and mood swings; agreeableness by cooperation and prosocial  
21 tendencies; conscientiousness by organisation and detail-orientation; and openness by  
22 creativity and a willingness to try new things (McCrae & John, 1992). In past research, the  
23 Big Five personality traits have shown to be significantly related to counseling and help-  
24 seeking attitudes.

1           Individuals with high extraversion have been found to report more positive attitudes  
2 towards help-seeking (Amirkhan, Risinger, & Swickert, 1995; Atik & Yalcin, 2011;  
3 Kakhnovets, 2011), psychosocial support (Klockner & Hicks, 2008), and counseling (Nocita  
4 & Stiles, 1986; Tsan & Day, 2007). Researchers have proffered that extraverts are more  
5 comfortable talking to other people, and would feel more at ease with counseling than  
6 introverts (Atik & Yalcin, 2011; Kakhnovets, 2011). Individuals with high neuroticism have  
7 also been found to possess better attitudes towards help-seeking (Kakhnovets, 2011),  
8 counseling (Seekles et al., 2012), healthcare use (Friedman et al., 2013), and mental health  
9 treatment utilization (Hopwood et al., 2008). A common explanation given here is that  
10 individuals who attain a low score on neuroticism are usually calm and even-tempered, and  
11 would not require as much emotional support as those who are highly neurotic (Kakhnovets,  
12 2011; Seekles et al., 2012). Individuals with high agreeableness have been shown to possess  
13 more positive attitudes towards help-seeking (Atik & Yalcin, 2011; Kakhnovets, 2011), and  
14 seeking information about mental care (Seekles et al., 2012). Kakhnovets (2011) notes that  
15 individuals low in agreeableness are often skeptical about the benefits of counseling, and are  
16 less likely to want to receive help from others. Individuals with high conscientiousness have  
17 been found to have poorer attitudes towards seeking practical support and skills training, with  
18 the explanation that such individuals are self-disciplined and task-oriented, and may have  
19 lesser need to seek help from others (Seekles et al., 2012). Finally, individuals with higher  
20 openness were found to have more positive attitudes towards help-seeking (Atik & Yalcin,  
21 2011; Kakhnovets, 2011; Komiya, Good, & Sherrod, 2000) and counseling (Bathje, Kim,  
22 Rau, Bassiouny, & Kim, 2014; Seekles et al., 2012). Individuals with high openness have  
23 been hypothesised to be willing to try new things and explore whether counseling is able to  
24 help them improve their situation (Atik & Yalcin, 2011; Kakhnovets, 2011).

## 25 **The Current Study: Aims and Hypotheses**



1 The questionnaire comprises of four scales: (a) stigma tolerance; (b) confidence in sport  
2 psychology consulting; (c) personal openness; (d) cultural preference. Respondents are  
3 required to report their attitudes and beliefs about sport psychology on a 7-point Likert scale  
4 ranging from “strongly disagree” to “strongly agree”. A higher score in stigma tolerance  
5 indicates that the individual has more stigma towards sport psychology consulting; a higher  
6 score in confidence in sport psychology consulting indicates that the individual is more  
7 confident in the benefits that sport psychology might provide; a higher score in personal  
8 openness indicates that athletes are less open to seeking sport psychology consulting; and a  
9 higher score in culture preference indicates that the individual prefers working with a sport  
10 psychology consultant of the same race or culture. The SPA-R has shown to be a reliable  
11 measure, with coefficient alphas ranging from 0.61 to 0.84 for all scales (Martin et al., 2002).

12 **NEO-FFI.** The NEO-Five Factor Inventory (NEO-FFI; Costa & McCrae, 1992) is a  
13 60-item questionnaire used to assess the Big Five personality traits. The questionnaire  
14 comprises of five scales that represent each of the Big Five personality traits: (a)  
15 extraversion; (b) neuroticism; (c) agreeableness; (d) conscientiousness; (e) openness.  
16 Respondents are required to answer personality-related questions on a 5-point Likert scale  
17 ranging from “strongly disagree” to “strongly agree”. A higher score for extraversion  
18 indicates that the individual is more outgoing and sociable; a higher score for neuroticism  
19 indicates that the individual is more prone to mood swings and emotional instability; a higher  
20 score for agreeableness indicates that the individual is more trusting and cooperative; a higher  
21 score for conscientiousness indicates that the individual is more self-disciplined and task  
22 oriented; and a higher score in openness indicates that the individual is more creative and  
23 imaginative. The NEO-FFI has shown to have construct validity, test-retest stability, with  
24 internal consistency ranging from 0.68 to 0.86 (Costa & McCrae, 1992).

25 **Procedures**

1           After receiving ethical approval from the institutional review board, pilot tests were  
2 conducted with a small sample of athletes to evaluate the clarity and content of the online  
3 Google Docs questionnaire. All of the athletes involved in the pilot tests gave feedback that  
4 the online questionnaire was appropriate and suitable. Subsequently, the sport teams of  
5 various universities, sport clubs, and sport institutes in the United Kingdom and Singapore  
6 were contacted through their administrators and asked to publicise the study to their athletes.  
7 Athletes who were willing to participate in the study were given a link to the online  
8 questionnaire. According to online informed consent procedures, participants were told of the  
9 purpose and details of the study through a participant information sheet. Participants were  
10 informed that all responses would be kept strictly confidential and would only be used for the  
11 purposes of the study. Having consented to participate in the study, participants filled in  
12 relevant demographic information, including their age, gender, ethnicity, nationality,  
13 education level, sport, level of sport participation, and number of years competing in the  
14 sport. They were also asked if they had previous experience of working with a sport  
15 psychology consultant, and were asked to evaluate whether they perceived their previous  
16 sport psychology experience to be effective, and were satisfied with the services rendered.  
17 Participants then proceeded to complete the SPA-R and NEO-FFI.

### 18 **Data Analysis**

19           All data analysis was conducted using SPSS 20.0. The first part of the data analysis  
20 involved a multivariate analysis of covariance (MANCOVA) with the participants' four SPA-  
21 R scale scores as dependent variables, and their previous experience with a sport psychology  
22 consultant as the covariate. Prior to running the MANCOVA, we tested for the assumptions  
23 of the covariate. This protocol falls in line with research by Wrisberg et al. (2009), who  
24 suggested that the effectiveness of previous sport psychology experience would affect sport  
25 psychology attitudes. In accordance with past research (Martin, 2005; Martin et al., 2004),

1 the MANCOVA sought to determine if the participants' sport psychology attitudes could be  
2 differentiated by culture (Western and Eastern), gender (male and female), type of sport  
3 (contact and non-contact), or any interaction between these factors.

4 The second part of the data analysis involved a series of multiple linear regression  
5 analyses that were conducted for each of the four variables of the SPA-R. Due to the lack of  
6 prior theory regarding the relationship between personality and sport psychology attitudes,  
7 the forced entry method was chosen for the multiple regression analyses, where all the  
8 predictor variables (i.e., the Big Five personality traits) were inputted into the regression  
9 equation simultaneously. The results were then analysed to determine how the Big Five  
10 personality traits predicted various attitudes towards sport psychology consulting in the  
11 athlete sample population.

## 12 Results

### 13 Participants

14 A total of 219 athletes ( $n = 127$  males and 92 females) participated this study. All  
15 athletes were aged 18 and over ( $M = 22.39$   $SD = 4.74$ ), and were currently competing at  
16 school, club, county, or national level. A very wide variety of sports were represented, with  
17 126 participants engaging in physical contact sports, and 93 participants engaging in non-  
18 contact sports. The definitions stated by Coakley (2001) were used for this study, with  
19 physical contact sports (e.g., rugby, football, judo) being characterised by bodily contact,  
20 intimidation, and physical injury; and non-contact sports (e.g., rowing, archery, sailing) being  
21 characterised by lack of physical contact or intimidation.

22 A total of 108 participants represented Western cultures ( $n = 55$  males and 53  
23 females), and 111 participants represented Eastern cultures ( $n = 72$  males and 39 females).  
24 The participants from Western cultures were predominantly of British nationality ( $n = 103$ ),  
25 and most identified themselves ethnically as White ( $n = 93$ ). The participants from Eastern

1 cultures were predominantly of Singaporean nationality ( $n = 103$ ), and most identified  
2 themselves ethnically as Chinese ( $n = 97$ ). More information about the demographics of the  
3 participants from both Western and Eastern cultures can be found in Table 1.

4 [INSERT TABLE 1 HERE]

#### 5 **Descriptive Statistics and Scale Reliabilities**

6 The basic descriptive statistics (means and standard deviations) for the SPA-R and  
7 NEO-FFI are shown in Table 2. For the SPA-R scores, the athletes had the highest scores for  
8 personal openness ( $M = 4.78$ ,  $SD = 0.85$ ), and the lowest scores for stigma tolerance ( $M =$   
9  $2.57$ ,  $SD = 0.95$ ). As for the NEO-FFI scores, the athletes scoring highest in extraversion ( $M$   
10  $= 3.56$ ,  $SD = 0.53$ ), and lowest in neuroticism ( $M = 2.83$ ,  $SD = 0.69$ ).

11 Estimates of internal consistency reliability (Cronbach's  $\alpha$ ) ranged from 0.52 to 0.87  
12 for the SPA-R, and 0.71 to 0.84 for the NEO-FFI.

13 [INSERT TABLE 2 HERE]

#### 14 **MANCOVA**

15 **Preliminary analysis.** Based on past evidence (Wrisberg et al., 2009) stating that the  
16 effectiveness of previous sport psychology experience was associated with attitudes towards  
17 sport psychology consulting, a one-way multivariate analysis of variance (MANOVA) was  
18 conducted with effectiveness of past sport psychology experience as the independent variable  
19 and the four scales of the SPA-R as the dependent variables. The MANOVA showed  
20 significant differences in attitudes towards sport psychology according to the different past  
21 experiences of sport psychology consulting, Wilks' Lambda = .90,  $F(8, 426) = 3.01$ ,  $p < .01$ ,  
22  $\eta^2 = .05$ . Due to the significant relationship that was found between past sport psychology  
23 experience and sport psychology attitudes, the effectiveness of past sport psychology  
24 experience was used as a covariate in the main analysis.

1           **Main analysis.** A multivariate analysis of covariance (MANCOVA) was conducted  
2 using the four SPA-R scale scores as dependent variables and the effectiveness of the  
3 athletes' past sport psychology experience as the covariate, to investigate if athletes' attitudes  
4 towards sport psychology consulting could be differentiated by culture (Western and  
5 Eastern), gender (male and female), type of sport (contact and non-contact), or any  
6 interaction of these factors.

7           The results of the MANCOVA indicated a significant main effect for culture, Wilks'  
8 Lambda = .81,  $F(4,207) = 12.56$ ,  $p < .001$ ,  $\eta^2 = .20$ . Follow-up univariate analyses revealed  
9 that stigma tolerance [ $F(1,210) = 17.89$ ,  $p < .001$ ,  $\eta^2 = .08$ ], personal openness [ $F(1,210) =$   
10  $15.96$ ,  $p < .001$ ,  $\eta^2 = .07$ ], and cultural preference [ $F(1,210) = 25.87$ ,  $p < .001$ ,  $\eta^2 = .11$ ] were  
11 the dependent variables that were significant (see Figure 1). Firstly, the responses of Western  
12 athletes ( $M = 2.33$ ,  $SD = 0.92$ ) indicated that they were less likely to stigmatise sport  
13 psychology than Eastern athletes ( $M = 2.81$ ,  $SD = .92$ ). Secondly, Western athletes ( $M = 4.52$ ,  
14  $SD = 0.78$ ) had more personal openness to sport psychology than Eastern athletes ( $M = 5.04$ ,  
15  $SD = 0.84$ ). Finally, Western athletes ( $M = 2.88$ ,  $SD = 0.98$ ) did not have as much preference  
16 for working with a sport psychology consultant of the same race and culture as Eastern  
17 athletes ( $M = 3.62$ ,  $SD = 1.10$ ).

18           [INSERT FIGURE 1 HERE]

19           There was also a significant three-way interaction effect found for culture, gender,  
20 and type of sport, Wilks' Lambda = .92,  $F(4,207) = 4.69$ ,  $p < .01$ ,  $\eta^2 = .08$ . The univariate  
21 analyses revealed that stigma tolerance [ $F(1,210) = 8.44$ ,  $p < .01$ ,  $\eta^2 = .04$ ] and personal  
22 openness [ $F(1,210) = 6.41$ ,  $p < .05$ ,  $\eta^2 = .03$ ] were the dependent variables that were  
23 significant. A two-way univariate analysis was conducted for each level of culture, and a  
24 significant interaction between gender and type of sport was found for Eastern athletes, but  
25 not for Western athletes. Firstly, Eastern males who played contact sports ( $M = 2.80$ ,  $SD =$

1 0.99) had lesser stigma towards sport psychology consulting than Eastern females who  
2 played contact sports ( $M = 3.44$ ,  $SD = 0.93$ ); however, there was no significant difference in  
3 stigma tolerance between Eastern males and females who played non-contact sports ( $M =$   
4  $2.76$ ,  $SD = 0.82$ , and  $M = 2.55$ ,  $SD = 0.78$ , respectively). Secondly, Eastern male athletes who  
5 played non-contact sports ( $M = 4.66$ ,  $SD = 1.02$ ) had greater personal openness to sport  
6 psychology than Eastern female athletes who played non-contact sports ( $M = 5.06$ ,  $SD =$   
7  $0.60$ ); on the other hand, Eastern male athletes who played contact sports ( $M = 5.27$ ,  $SD =$   
8  $0.78$ ) had lesser personal openness than Eastern female athletes who played contact sports ( $M$   
9  $= 4.82$ ,  $SD = 0.86$ ).

10 There were no main effects found for gender, Wilks' Lambda = 0.96,  $F(4,207) = 1.92$ ,  
11  $p > .05$ ,  $\eta^2 = .04$ ; type of sport, Wilks' Lambda = 0.96,  $F(4,207) = 1.94$ ,  $p > .05$ ,  $\eta^2 = .04$ ; nor  
12 were there any other interaction effects found.

### 13 **Multiple Linear Regression Analysis**

14 An inspection of the variance inflation factor (VIF) among the independent variables  
15 did not reveal issues of multicollinearity (VIF ranged from 1.01 to 1.24).

16 [INSERT TABLE 3 HERE]

17 **Stigma tolerance.** The multiple linear regression analysis (see Table 3 for all multiple  
18 regression analysis results) showed that the model significantly predicted stigma tolerance for  
19 the athlete sample [ $F(5, 213) = 8.62$ ,  $p < .001$ ,  $R^2 = .17$ ,  $f^2 = .20$ ]. This indicates that 17% of  
20 the variance in stigma tolerance can be explained by personality factors. Both  
21 conscientiousness ( $\beta = -.30$ ,  $t = -4.51$ ,  $p < .001$ ) and openness ( $\beta = -.24$ ,  $t = -3.83$ ,  $p < .001$ )  
22 were found to be significant predictors of stigma tolerance. The results indicated that higher  
23 levels of conscientiousness and openness predicted lesser stigma towards sport psychology  
24 consulting.



1 openness towards sport psychology consulting, but have more confidence in sport  
2 psychology consulting, and lower stigma perceptions than Western athletes. The findings of  
3 the study demonstrated only partial support for these hypotheses. On one hand, Eastern  
4 athletes preferred working with consultants of the same culture and had less openness  
5 towards sport psychology consulting, which was in line with previous literature. However,  
6 they reported greater stigma towards sport psychology consulting than their Western  
7 counterparts and were similar in terms of their confidence in sport psychology consulting – a  
8 finding that contrasts with previous research by Naoi et al. (2011). A possible reason for the  
9 difference in findings is that the majority of the Western athletes in the current study were  
10 British, while all of the Western athletes surveyed in the Naoi et al. (2011) study were  
11 American. In past research, Martin et al. (2004) found that American athletes had greater  
12 stigma towards sport psychology services and lesser confidence in such services than British  
13 athletes. Therefore, it is possible that the disparity in findings between the two studies could  
14 be due to sub-cultural differences between British and American athletes with respect to sport  
15 psychology attitudes.

16 In terms of explaining why Eastern athletes had less positive attitudes towards sport  
17 psychology consulting compared to Western athletes, Araki and Balasekaran (2009) stated  
18 that sport psychology development in Singapore is still in its infancy compared to a well-  
19 developed sporting nation like UK. Therefore, there is not much education regarding the  
20 benefits of sport psychology amongst Singaporean athletes, which could possibly result in  
21 them not being as open towards sport psychology consulting compared to their British  
22 counterparts. Terry (2009) also added that Asian athletes are often reluctant to discuss  
23 limitations or worries with a sport psychology consultant, and that this usually persists until  
24 rapport and trust is developed. He also mentioned that Chinese athletes might not be open to  
25 seeing a sport psychology consultant as it might be construed as a shameful act and might

1 bring dishonour to their family or cultural group. This would also help to explain why the  
2 Chinese Singaporean athletes in this study were less open to engaging in sport psychology  
3 consulting compared to White British athletes. In addition, Araki and Balasekaran (2009)  
4 also stated that Singaporean athletes are highly submissive, and are not comfortable with  
5 voicing their opinion or making decisions on their own. As such, they might be more  
6 comfortable working with a local sport psychology consultant who understands their specific  
7 communication style, as compared to a foreign consultant who might not understand their  
8 unique mannerisms.

9 Another notable observation was that while Western athletes had greater openness to  
10 sport psychology consulting than Eastern athletes, their mean score obtained of 4.52 was still  
11 relatively high. This suggests that while Western athletes may be more open towards sport  
12 psychology consulting than Eastern athletes, the mean score still reflects a certain degree of  
13 reluctance to try sport psychology consulting. This is in line with previous research  
14 conducted in Western contexts (Green et al., 2012; Pain and Harwood, 2004) which  
15 suggested that some Western athletes might still not be open to engaging in sport psychology  
16 consulting.

17 There were also no significant main effects observed for gender or type of sport. This  
18 lies contrary to previous literature (Anderson et al., 2004; Martin, 2005; Martin et al., 2004;  
19 Wrisberg et al., 2009), which suggested that gender and type of sport both have an influence  
20 on athletes' sport psychology attitudes. However, there was a significant three-way  
21 interaction effect observed for culture, gender and type of sport. This is in line with previous  
22 literature relating to sub-culture in sport psychology (Coulter, Mallett, & Singer, 2016;  
23 Schinke & McGannon, 2014), where the authors advocate the need to critically consider the  
24 athlete's specific background and context in order to fully appreciate their attitudes towards  
25 sport psychology. This three-way interaction effect reflects the complexity that exists within

1 each individual athlete, and suggests that athletes cannot be stereotyped purely based on  
2 broad categories. For example, Eastern males who played contact sports were found to have  
3 less stigma towards sport psychology consulting, but yet also had less personal openness  
4 towards it as compared to Eastern females who played contact sports. However, in terms of  
5 non-contact sport athletes, it was Eastern males who had greater personal openness instead of  
6 Eastern females.

### 7 **Personality and Sport Psychology Attitudes**

8         The second aim of this study was to investigate whether athletes' Big Five personality  
9 traits would predict their attitudes towards sport psychology consulting (i.e., stigma tolerance,  
10 confidence in sport psychology consulting, personal openness, and cultural preference). The  
11 hypothesis was that high extraversion, neuroticism, agreeableness, openness, and low  
12 conscientiousness would predict more positive attitudes towards sport psychology consulting.  
13 Once again, the findings of this study showed mixed support for the hypothesis. On one hand,  
14 certain personality traits such as openness and neuroticism predicted positive attitudes  
15 towards sport psychology consulting; but on the other hand, traits such as extraversion and  
16 agreeableness did not show any significant relation to sport psychology attitudes. Early  
17 conjectures based on past research (Atik & Yalcin, 2011; Kakhnovets, 2011) suggest that  
18 individuals with higher openness may be more willing to try new things and explore whether  
19 sport psychology can help them; and those with higher neuroticism may be less emotionally  
20 stable and might have more impetus for seeking out sport psychology help. However, further  
21 research needs to be conducted to fully ascertain the reasons behind the findings.

22         There was also a contrary finding for the personality trait of conscientiousness,  
23 whereby high conscientiousness was found to predict lower levels of stigma towards sport  
24 psychology consulting, as well as greater confidence in sport psychology consulting. This is  
25 in contrast with previous research by Seekles et al. (2012), who found that high

1 conscientiousness was associated with lower acceptance of psychological support services.  
2 However, it must be noted that the study by Seekles et al. (2012) investigated clinically  
3 depressed patients, and it is possible that more mentally healthy athletes who participated in  
4 this study would have a very different response towards seeking psychological help from a  
5 sport-specific professional. Since individuals with high conscientiousness are more organised  
6 and detail-orientated (McCrae & John, 1992), it is possible that they might have done some  
7 background research to find out more about the benefits of sport psychology. This would  
8 have equipped them with a greater understanding of how sport psychology can help them,  
9 and thus increase their acceptance of sport psychology services.

10 The results also showed that none of the Big Five personality traits predicted personal  
11 openness in athletes. This non-significant finding might appear to be rather surprising due to  
12 the similarity in definitions of openness used in the SPA-R and the Big Five model. In the  
13 SPA-R, the construct of personal openness is characterised by a willingness to engage in  
14 sport psychology consultation (Martin et al., 2002); while in the Big Five model, the  
15 personality trait of openness is described as a willingness to try new things (McCrae & John,  
16 1992). More research needs to be conducted to fully examine how these two constructs might  
17 be related to each other.

18 Lastly, there were also new insights into how athletes' personality could affect their  
19 cultural preference. It was found that higher levels of openness predicted lesser preference for  
20 working with a sport psychology consultant of the same race or culture. This is in line with  
21 previous research by Flynn (2005), who found that individuals with higher openness were  
22 less prejudiced towards people of other races as they placed greater importance in obtaining  
23 novel information from new sources. Therefore, such individuals would be more willing to  
24 work with a sport psychology consultant of a different culture so that they might gain new  
25 perspectives and ideas to improve their sporting performance.

## 1 **Practical Implications**

2           The findings of this study offer a number of implications and considerations for  
3 consultants with respect to making their service provision more attractive to a wider range of  
4 athletes. In terms of working with athletes from Eastern and Western cultures, there appear to  
5 be several significant differences in their attitudes towards sport psychology consulting. On a  
6 whole, Eastern athletes appear to stigmatise sport psychology consulting more, be less open  
7 to engaging in sport psychology consulting, and have greater preference for working with a  
8 consultant of the same race or culture than Western athletes. This is explained by Shea and  
9 Yeh (2008), who suggested that Eastern individuals might find seeking psychological help to  
10 be in conflict with their cultural belief system, due to the strong Eastern emphasis on  
11 restraining one's feelings and enduring pain for the sake of social harmony. Therefore, sport  
12 psychology consultants need to do more to reach out and explain their services to Eastern  
13 athletes, so as to make sport psychology more accessible and attractive to them. Sport  
14 psychology consultants also need to have greater sensitivity towards how their athletes might  
15 manifest collectivism or individualism in accordance to their cultural background. This will  
16 help them to better understand the level of resistance that their athletes might have towards  
17 sport psychology, and enable them to adjust their service delivery approach accordingly.

18           Finally, not all Eastern athletes possess the same attitudes towards sport psychology  
19 consulting, but their attitudes can vary as function of their gender and sport type. For Eastern  
20 female athletes who play contact sports, sport psychology consultants may need to spend  
21 more time addressing the stigmas that they might have towards sport psychology consulting.  
22 As for Eastern male athletes who play contact sports, they may need to put extra effort into  
23 building rapport and gaining entry with such athletes before they are willing to accept sport  
24 psychology services.

1           In terms of gaining entry with their athletes, sport psychology consultants may  
2 consider assessment of the Big Five personality traits of their athletes before starting work  
3 with them. After benchmarking their athletes' personality scores against established norms,  
4 the consultant may be able to interpret the findings to facilitate better acceptance and  
5 effectiveness in their work with the athlete. Based on the findings of this study, sport  
6 psychology consultants should seek to debunk certain stigma associated with sport  
7 psychology in athletes who have low conscientiousness and low openness. They should also  
8 endeavour to explain the potential benefits of sport psychology to athletes with low  
9 conscientiousness, openness, and neuroticism. This will help to instill a greater amount of  
10 confidence towards sport psychology consulting in such athletes. Lastly, when working with  
11 athletes of a difference race or culture, they should be aware that athletes with low openness  
12 might have certain prejudices and biases towards the consultant. Thus, they should make an  
13 extra effort to reach out to such athletes in the process of sensitive rapport building.

14           The findings of this study also have various implications for the training of young  
15 sport psychology practitioners. Improved education for young practitioners in the area of  
16 personality and its assessment may be valuable in terms enhancing tools for marketing,  
17 service promotion, and overall service delivery.

### 18 **Limitations and Future Directions**

19           An acknowledged limitation of this study is that the participants surveyed were not a  
20 random representation of athletes from Eastern and Western cultures. As mentioned earlier,  
21 the athletes from Eastern cultures were predominantly of Singaporean nationality (93%), and  
22 the participants from Western cultures were predominantly of British nationality (95%). Even  
23 though Singapore has strong roots in Eastern culture and is deeply entrenched in Asian and  
24 Confucian values (Araki & Balasekaran, 2009), it has also been identified as a very  
25 cosmopolitan and globalised country, where Western and Eastern values both feature very

1 prominently in society (Xinyi, Smith, & Adegbola, 2004). Therefore, future research should  
2 seek to compare Singaporean athletes with athletes from more traditional Eastern nations  
3 (e.g., China, Japan, Korea), to identify how athletes in those countries might differ in terms of  
4 their sport psychology attitudes. As for athletes of British nationality, they typically represent  
5 the ethnocentric white perspective that has dominated sport psychology research (Kontos &  
6 Breland-Noble, 2002). However, previous literature has indicated that there still exist various  
7 differences between Western athletes of different nationalities. For example, British athletes  
8 were found to differ from American or German athletes in terms of stigma tolerance,  
9 confidence in sport psychology consulting, and cultural preference (Martin et al., 2004).  
10 Therefore, future research should also be conducted with athletes of other Western  
11 nationalities in order to fully understand the fine nuances that define their attitudes towards  
12 sport psychology consulting.

13 Another key limitation was that most of the athletes surveyed in this study were  
14 highly educated (95% attended college, university or higher), which might threaten the  
15 applicability of the results to less highly educated athletes.

16 Although the results of this study provide useful insight into how personality and  
17 culture affect the sport psychology attitudes of athletes, future research needs to be conducted  
18 to identify why certain personality traits might affect specific attitudes. Qualitative analysis  
19 should be conducted with athletes of various personality types to uncover their thoughts and  
20 attitudes towards sport psychology consulting. This would enable an additional, richer  
21 understanding of how various personality traits might affect sport psychology attitudes.

## 22 **Conclusion**

23 In summary, this study found that athletes from Eastern and Western cultures differed  
24 significantly in terms of their attitudes towards sport psychology consulting. Western athletes  
25 had lesser stigma towards sport psychology consulting, greater personal openness, and lesser

1 preference for a consultant of the same race or culture than Eastern athletes. The study also  
2 found that certain personality traits predicted athletes' attitudes towards sport psychology  
3 consulting. High conscientiousness and openness predicted lesser stigma towards sport  
4 psychology consulting; high conscientiousness, openness, and neuroticism predicted greater  
5 confidence in sport psychology consulting; and finally, low openness predicted greater  
6 preference for a consultant of the same race or culture. In offering fresh insights into how  
7 culture and personality affect athletes' attitudes towards sport psychology consulting, we  
8 hope that this study triggers further investigation into the cultural and individual factors that  
9 matter when optimising engagement in sport psychology services.

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## Tables

Table 1  
Demographic information of Western and Eastern culture participants

	Western ( <i>n</i> = 108)	Eastern ( <i>n</i> = 111)	Combined ( <i>n</i> = 219)
<i>Gender</i>			
Male	55	72	127
Female	53	39	92
Age	21.96 (5.66)	22.81 (3.60)	22.39 (4.74)
Years of Sport Experience	8.93 (5.73)	6.58 (4.98)	7.74 (5.48)
<i>Education Level</i>			
High School or Lower	2	10	12
College/Undergraduate	96	92	188
Postgraduate	10	9	19
<i>Level of Sport Participation</i>			
School	20	48	68
Club	43	41	84
County	22	3	25
National	23	19	42
<i>Type of Sport</i>			
Contact	65	61	126
Non-Contact	43	50	93
<i>Previous Sport Psychology Experience</i>			
None	90	98	188
Yes (Effective)	12	10	22
Yes (Ineffective)	6	3	9

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Table 2  
Means and standard deviations for Western and Eastern culture participants

	Western ( <i>n</i> = 108)	Eastern ( <i>n</i> = 111)	Combined ( <i>n</i> = 219)
<i>Personality</i>			
Extraversion	3.70 (0.49)	3.42 (0.53)	3.56 (0.53)
Neuroticism	2.81 (0.73)	2.86 (0.64)	2.83 (0.69)
Agreeableness	3.46 (0.48)	3.53 (0.41)	3.50 (0.45)
Conscientiousness	3.76 (0.52)	3.47 (0.51)	3.61 (0.54)
Openness	3.22 (0.50)	3.26 (0.52)	3.24 (0.51)
<i>Sport Psychology Attitudes</i>			
Stigma Tolerance	2.33 (0.92)	2.81 (0.92)	2.57 (0.95)
Confidence in Sport Psychology	4.55 (1.04)	4.68 (0.96)	4.61 (1.00)
Personal Openness	4.52 (0.78)	5.04 (0.84)	4.78 (0.85)
Cultural Preference	2.88 (0.98)	3.62 (1.10)	3.25 (1.10)

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Table 3

Multiple regression analysis results

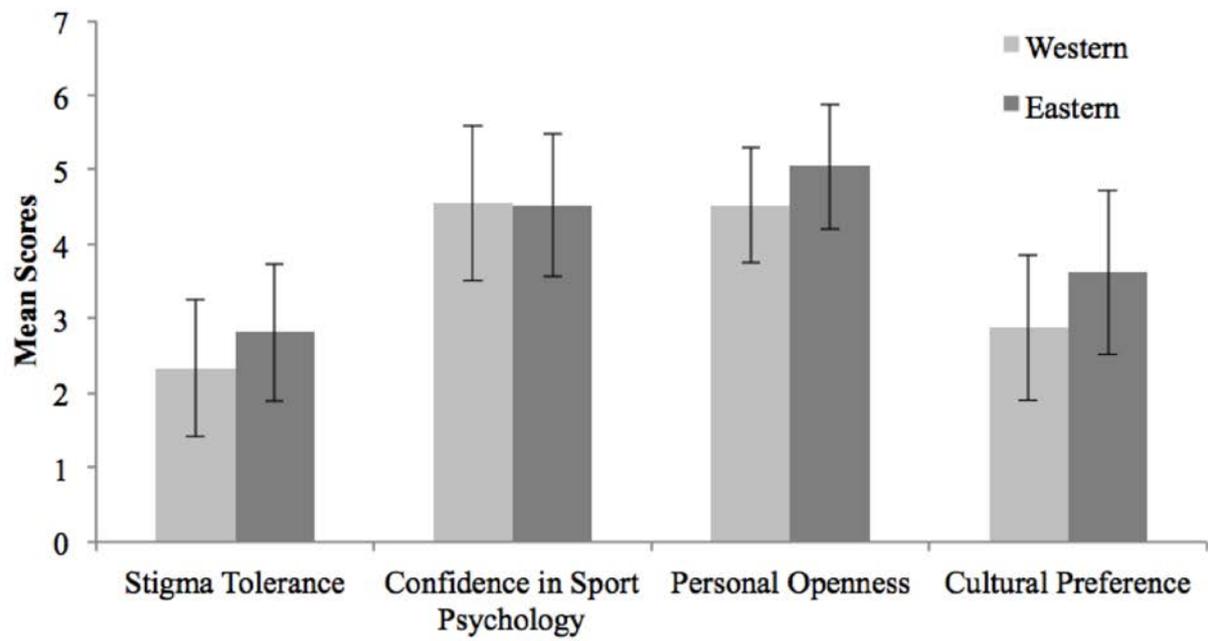
	SPA-R Scales ( <i>n</i> = 219)											
	Stigma Tolerance			Confidence in Sport Psychology			Personal Openness			Cultural Preference		
	B	SE B	β	B	SE B	β	B	SE B	β	B	SE B	β
Extraversion	-0.10	0.13	-.06	0.27	0.14	.14	-0.09	0.12	-.06	-0.10	0.15	-.05
Neuroticism	0.11	0.09	.08	0.38	0.10	.26***	-0.12	0.09	-.09	-0.03	0.12	-.02
Agreeableness	0.01	0.14	.00	-0.03	0.15	-.01	-0.14	0.14	-.08	-0.24	0.17	-.10
Conscientiousness	-0.52	0.12	-.30***	0.42	0.13	.23**	-0.08	0.11	-.05	-0.17	0.14	-.08
Openness	-0.45	0.12	-.24***	0.30	0.13	.15*	0.04	0.11	.03	-0.50	0.14	-.23***
<i>R</i> <sup>2</sup>	.17						.02			.07		
<i>F</i>	5.45***			0.76			0.76			3.18**		

Note: \* *p* < .05, \*\* *p* < .01, \*\*\* *p* < .001

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Figures

2 **Figure 1.** Mean scores of SPA-R subscales as a function of culture.



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