

Est.  
1841

YORK  
ST JOHN  
UNIVERSITY

Watson, Dean R., Hill, Andrew P. ORCID:  
<https://orcid.org/0000-0001-6370-8901> and Madigan, Daniel J.  
ORCID: <https://orcid.org/0000-0002-9937-1818> (2021)  
Perfectionism and Attitudes Towards Sport Psychology Support and  
Mental Health Support in Athletes. *Journal of Clinical Sport  
Psychology*. pp. 1-16.

Downloaded from: <http://ray.yorks.ac.uk/id/eprint/5388/>

The version presented here may differ from the published version or version of record. If  
you intend to cite from the work you are advised to consult the publisher's version:  
<https://doi.org/10.1123/jcsp.2020-0052>

Research at York St John (RaY) is an institutional repository. It supports the principles of  
open access by making the research outputs of the University available in digital form.  
Copyright of the items stored in RaY reside with the authors and/or other copyright  
owners. Users may access full text items free of charge, and may download a copy for  
private study or non-commercial research. For further reuse terms, see licence terms  
governing individual outputs. [Institutional Repository Policy Statement](#)

# RaY

Research at the University of York St John

For more information please contact RaY at [ray@yorks.ac.uk](mailto:ray@yorks.ac.uk)

Watson, D. R., Hill, A. P., & Madigan, D. J. (2021). Perfectionism and Attitudes Towards Sport Psychology Support and Mental Health Support in Athletes. *Journal of Clinical Sport Psychology*. Accepted 27-06-2021 [Accepted Version].

Perfectionism and Attitudes Towards Sport Psychology Support and Mental Health  
Support in Athletes

Dean R. Watson, Andrew P. Hill, & Daniel J. Madigan

York St. John University, UK

Author Note

Dean R. Watson, School of Science, Technology and Health, York St. John University;  
Andrew P. Hill, School of Science, Technology and Health, York St. John University; Daniel  
J. Madigan, School of Science, Technology and Health, York St. John University.

Correspondence concerning this article should be addressed to Dean Watson, School of  
Science, Technology and Health, York St. John University, Lord Mayor's Walk, York YO31  
7EX, UK. E-mail: dean.watson@yorks.ac.uk, Tel: (+44)1904 876512

**Abstract**

Attitudes towards help-seeking will contribute to whether athletes ask for support for performance and mental health issues when needed. While research outside of sport has found perfectionism is related to negative attitudes towards help-seeking, no studies have examined the relationship in sport. We provided the first test of whether perfectionism predicted attitudes towards both sport psychology support and mental health support. One hundred and sixty-six collegiate athletes completed measures of perfectionism and attitudes towards sport psychology support and mental health support. Multiple regression analyses revealed that perfectionistic concerns positively predicted closedness and stigma to sport psychology support and mental health support, and negatively predicted help-seeking towards mental health support. However, perfectionistic strivings negatively predicted stigma to sport psychology support and mental health support, and positively predicted confidence in sport psychology support and help-seeking towards mental health support. Athletes higher in perfectionistic concerns are less likely to seek support when required.

Keywords: Perfectionistic Strivings; Perfectionistic Concerns; Help-Seeking; Attitudes

Athletes require help from many professionals to support their participation and efforts to fulfill their potential. The support can be related to their performance but also related to their mental health. However, because sport is characterized by a culture that celebrates mental toughness and fortitude, some athletes may actually be less likely to seek support when it is needed (Bauman, 2016). This possibility may partly explain evidence that indicates the percentage of athletes who suffer from mental health problems is higher than that of the general population (e.g., Foskett & Longstaff, 2018). Identifying factors that predict help-seeking is therefore important to assist all athletes not only with optimizing performance but also in maintaining their mental health. Accordingly, the present study aims to examine whether perfectionism is a factor that is related to attitudes towards sport psychology support and mental health support in athletes.

### **Attitudes Towards Sport Psychology Support**

In the same way that most athletes can benefit from better physical, technical and tactical coaching, most athletes will benefit from the support of a sport psychologist. However, whether an athlete chooses to use the services provided by a sport psychologist will be influenced by their attitudes towards the service and the service provider (Anderson, Hodge, Lavalley, & Martin, 2004). Attitudes are an evaluation of an object, person, or concept and are generally positive or negative (Fazio & Petty, 2008; Hepler & Albarracín, 2013). Attitudes towards sport psychology support have been studied by the assessment of stigma tolerance (apprehension for fear of being stigmatized by others as having psychological problems), confidence in a sport psychology consultation (belief in the positive effects of sport psychology), personal openness (willingness to practice sport psychology skills), and cultural preference (preference towards a sport psychologist who is ethnically and racially similar) (Martin, Kellman, Lavalley, & Page, 2002). More positive attitudes are signaled by higher confidence in a sport psychology consultation and personal openness and

lower stigma tolerance and cultural preference, and more negative attitudes signaled by the reverse (Martin et al., 2002).

Research examining athletes' general attitudes towards seeking support was recently systematically reviewed by Castaldelli-Maia et al. (2019). Based on 52 studies, Castaldelli-Maia and colleagues concluded that low mental health literacy, negative past experiences with mental health treatment-seeking, busy schedules, and hypermasculinity are the main factors associated with negative general attitudes towards seeking support among athletes. The studies focusing specifically on attitudes towards sport psychology support found some evidence that attitudes can differ in regards to a range of factors (e.g., gender, age, sports type, nationality, and culture; Anderson et al., 2004; Martin, 2005; Martin, Lavallee, Kellman, & Page, 2004). Importantly for the current study, there was evidence that personality characteristics play a key role in the attitudes that are formed with conscientiousness, neuroticism, and openness all predicting more positive attitudes towards sport psychology support (Ong & Harwood, 2018).

### **Attitudes Towards Mental Health Support**

Mental health is a state of wellbeing in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to contribute to his or her community (World Health Organization, 2018). The importance of safeguarding mental health in sport is becoming increasingly recognized. The International Olympic Committee (IOC) recently published a consensus statement on this issue, for example, in which they called for a greater understanding of mental health issues in sport and improved support for all those taking part (Reardon et al., 2019). Attitudes towards mental health support refer to the evaluation people make about services, service providers, and the overall notion of receiving help with their mental health (Choudhry, Mani, Ming, & Khan, 2016). Similar to sport psychology support, attitudes towards help-seeking for mental

health support comprise of indifference to stigma (concern about what important others will think if they sought professional help for psychological problems), help-seeking propensity (willing and able to seek professional help), and psychological openness (openness to acknowledge psychological problems and the possibility of professional help), with positive and negative attitudes signaled in the same way (Mackenzie, Knox, Gekoski, & Macaulay, 2004).

The review conducted by Castaldelli-Maia et al. (2019) also included studies that focused specifically on attitudes towards mental health support. Generally, the finding of these studies mirrors those for attitudes towards sport psychology support linking attitudes towards mental health support with a range of demographic, social and personal characteristics. Notably, there was also evidence that athletes may exhibit more negative attitudes towards mental health support than non-athletes. For example, both Watson (2005) and Barnard (2016) found that collegiate athletes reported less willingness to seek mental health treatment than non-athletes. As such, athletes and collegiate athletes are a group that may especially benefit from a better understanding of factors that predict negative attitudes towards help-seeking.

### **Multidimensional Perfectionism**

One factor that has been linked to negative attitudes towards help-seeking outside of sport is perfectionism. Perfectionism is a personality trait that comprises excessively high personal standards which are accompanied by overly critical evaluations of behaviour (Frost & Marten, 1990). Current understanding suggests that perfectionism is a multidimensional trait and includes two higher order dimensions: perfectionistic strivings (PS) reflecting personal standards and a self-orientated striving for perfection and perfectionistic concerns (PC) reflecting concerns about making mistakes, feelings of discrepancy between one's standards and performance, and negative reactions to imperfection (Stoeber & Otto, 2006).

These two broad dimensions of perfectionism are inclusive of different sub-dimensions of perfectionism that are commonly examined as proxies of PS (e.g., striving for perfection, personal standards, and self-orientated perfectionism) and PC (e.g., concerns over mistakes, negative reactions to imperfection, and socially-prescribed perfectionism).

A recent review of perfectionism in sport underscores the importance of perfectionism for athletes (Hill, Mallinson-Howard, & Jowett, 2018). The review included 52 studies of perfectionism in different sports and levels of participation and spanned 26 years of research (from 1990 to 2016). PS and PC were found to have divergent relationships with a range of outcomes. In this regard, PS was found to be ambiguous in relation to motivation (e.g., task and ego orientation) and emotions (e.g., positive and negative affect), but positively related to performance. By contrast, PC was related to maladaptive motivation (e.g., fear of failure and mastery avoidance) and emotions (e.g., anxiety and anger) and unrelated to performance. The review concluded that PC is likely to be extremely debilitating for athletes. In accord, Hill and colleagues recommended that PC is monitored closely and managed by both athletes and those responsible for their welfare.

### **Perfectionism and Attitudes Towards Sport Psychology Support and Mental Health Support**

In order to successfully support perfectionistic athletes, we need to know more about the way perfectionism might influence help-seeking attitudes towards sport psychology support and mental health support. It is possible, for example, that some dimensions of perfectionism may be disruptive and impede athletes' help-seeking via their attitudes. In particular, higher levels of PC are related to a desire to hide flaws, a fear of disapproval, and a fear of negative evaluation (Shafique, Gul, & Raseed, 2017). With this in mind, athletes with higher levels of PC may fear being judged negatively if they seek help for mental health. By contrast, the same desire for concealment does not seem evident for PS. In addition, because

athletes with higher levels of PS may do anything possible to achieve perfection (Stoll, Lau, & Stoeber, 2008), they may be more open to seeking help when needed, at least if they perceive that it will facilitate better performance. Consequently, the relationship between perfectionism and attitudes towards help-seeking may be more complex with both problematic (PC) and less problematic dimensions (PS).

To date, no studies have examined perfectionism and attitudes towards sport psychology support in athletes. However, a number of studies have been conducted that have found perfectionism to be related to attitudes towards other things in sport such as doping (using banned substances to enhance athletic performance). This research has found, for example, PC to be positively related to favorable attitudes towards doping and PS to be unrelated (Madigan, Mallinson-Howard, Grugan, & Hill, 2019). In regards to seeking help with performance, there is also evidence that PC, in particular, are related to avoidant coping (denial and behavioural disengagement), less optimism, more pessimism, and less self-compassion when dealing with performance difficulties (Hill, Hall, & Appleton, 2010; Lizmore, Dunn, & Dunn, 2017). Taken together, these studies suggest that PC may have the potential to contribute towards more negative attitudes towards sport psychology support.

There are also currently no studies that have examined perfectionism and attitudes towards mental health support in sport. However, there is a wealth of research in education that has examined perfectionism and attitudes towards mental health support. For example, among university students, Shannon, Goldberg, Flett, and Hewitt (2018) found that socially-prescribed perfectionism (an indicator of PC) predicted negative perceptions of stigma by others whereas self-oriented perfectionism (an indicator of PS) positively predicted self-stigma. In a more recent study of university students, Dang, Quesnel, Hewitt, Flett, and Deng (2020) also found that socially-prescribed perfectionism was significantly related to higher levels of stigma and lower levels of openness towards help-seeking. However, self-oriented



perfectionism was significantly related to higher confidence in mental health professionals. These findings provide evidence for a link between PS and PC with attitudes towards help-seeking and are suggestive of a similar link in collegiate athletes.

### **The Present Study**

Against this background, the aim of the present study was to provide the first examination of whether perfectionism predicts attitudes towards sport psychology support and mental health support in collegiate athletes. Based on the arguments articulated above, we hypothesized that PS would predict positive attitudes towards sport psychology support and mental health support (H1) and that PC would predict negative attitudes towards both sport psychology support and mental health support (H2).

### **Method**

#### **Participants**

A sample of 166 collegiate athletes (51 females, 115 males) was recruited from universities in the United Kingdom to participate in the present study. The participants' mean age was 21.3 years ( $SD = 3.2$ ; range = 18 to 35) and trained an average of 7.5 hours per week ( $SD = 5.1$ ). Participants were involved in a range of sports including individual (e.g., climbing, archery and powerlifting) and team sports (e.g., football, rowing and hockey), and competed at recreational ( $n = 34$ ), regional ( $n = 43$ ), national ( $n = 61$ ), and international ( $n = 28$ ) levels.

#### **Procedure**

The study was approved by the university ethics committee. Participants were recruited via advertisement and email. Informed consent was obtained from all participants. A paper-and-pencil questionnaire was distributed by the lead author and completed at athletes' training venues. Questionnaires took approximately 10 minutes to complete.

#### **Measures**

**Perfectionism.** To measure perfectionism we used six subscales from three multidimensional measures of perfectionism in sport: the Sport Multidimensional Perfectionism Scale-2 (SMPS-2; Gotwals & Dunn, 2009), the Multidimensional Inventory of Perfectionism in Sport (MIPS; Stoeber, Otto, Pescheck, Becker, & Stoll, 2007) and the Performance Perfectionism Scale-Sport (PPS-S; Hill, Appleton, & Mallinson-Howard, 2016). Following the recommendations of Stoeber and Madigan (2016), to measure PS we used (a) the SMPS-2 subscale capturing Personal Standards (7 items; e.g., “I have extremely high goals for myself in my sport”), (b) the MIPS subscale capturing Striving for Perfection (5 items; e.g., “I strive to be as perfect as possible”) and (c) the PPS-S subscale capturing Self-Oriented Perfectionism (4 items; e.g., “I put pressure on myself to perform perfectly”). To measure PC, we used (a) the SMPS-2 subscale capturing Concerns Over Mistakes (8 items; e.g., “People will probably think less of me if I make mistakes in competition”), (b) the MIPS subscale capturing Negative Reactions to Imperfection (5 items; e.g., “I feel extremely stressed if everything does not go perfectly”) and (c) the PPS-S subscale capturing Socially-Prescribed Perfectionism (4 items; e.g., “People always expect more, no matter how well I perform”). The SMPS-2 and the MIPS had a response format of 1 (*strongly disagree*) to 5 (*strongly agree*) and for the PPS-S had a response format of 1 (*strongly disagree*) to 7 (*strongly agree*). All three instruments have previous evidence of reliability and validity (e.g., Cronbach’s alphas  $> .70$ ; Hill et al., 2016; Madigan, Stoeber, & Passfield, 2016; Dunn et al., 2016).

To create PS and PC, subscales were first standardized and then added together. This technique allows subscales with a different number of items and response formats to be combined in a way that weights their contribution equally into a standard set of units. It is an approach that has been used by others when examining perfectionism (e.g., Dunkley, Zuroff, & Blankstein, 2003; Enns, Cox, Sareen, & Freeman, 2001; Stoeber & Janssen, 2011). Finally,

it also has the added benefit when using regression analyses of anchoring regression coefficients at the mean of the subscales as opposed to zero which is not typically included in response formats, as is the case here (Aiken & West, 1991).

**Attitudes Towards Sport Psychology Support.** To measure attitudes towards sport psychology support we used the Sport Psychology Attitudes-Revised questionnaire (SPA-R; Martin, Wrisberg, Beitel, & Lounsbury, 1997; Martin et al., 2002). The SPA-R includes 25 items and four subscales: (a) Confidence (8 items; e.g., “A sport psychology consultant can help athletes improve their mental toughness”), (b) Cultural Preference (4 items; e.g., “I respect the opinions of people of my own culture more so than those of people of another culture”), (c) Stigma Tolerance (7 items; e.g., “I would not go to a sport psychology consultant because my teammates would harass me”), (d) Personal Openness (6 items; e.g., “There are certain problems, which should not be discussed outside one's immediate family”). The SPA-R has a response format of 1 (*strongly disagree*) to 7 (*strongly agree*) and has been shown to be a reliable and valid measure with previous Cronbach's alphas ranging between .61 to .84 (Ong & Harwood, 2018).

**Attitudes Towards Mental Health Support.** To measure attitudes towards mental health support we used the Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS; Mackenzie et al., 2004). The IASMHS includes 24 items and three subscales: (a) Psychological Openness (8 items; e.g., “There are certain problems which should not be discussed outside of one's immediate family”), (b) Help-Seeking Propensity (8 items; e.g., “I would have a very good idea of what to do and who to talk to if I decided to seek professional help for psychological problems”), (c) Indifference to Stigma (8 items; e.g., “I would not want my significant other, spouse, partner, etc., to know if I was suffering from psychological problems”). The IASMHS has a response format from 0 (*disagree*) to 4 (*agree*) and has been

shown to be a reliable and valid measure with previous Cronbach's alphas ranging between .76 to .82 (Wahto, Swift, & Whipple, 2016).

### **Data Screening**

First, we inspected the data for missing values. Because very few item responses were missing ( $i = 3$ ), missing responses were replaced with the mean of the item responses of the corresponding scale (Graham, Cumsille, & Elek-Fisk, 2003). Next, we computed Cronbach's alphas for our variables, which were all satisfactory (see Table 1). Finally, following recommendations by Tabachnick and Fidell (2007), data were screened for univariate and multivariate outliers. No outliers were found.

## **Results**

### **Internal Reliabilities, Descriptive Statistics and Bivariate Correlations**

Internal reliabilities, descriptive statistics, and bivariate correlations are displayed in Table 1. All instruments displayed adequate levels of internal reliability (Cronbach's alphas > .70). PS showed significant positive correlations with personal openness towards mental health support, stigma to mental health support, confidence in sport psychology support and personal openness to sport psychology support. By contrast, PC showed significant negative correlations with personal openness to mental health support, stigma to mental health support, cultural preference to sport psychology support, stigma to sport psychology support and personal openness to sport psychology support. PS and PC also had a significant positive correlation with each other.

### **Multiple Regression Analyses**

We conducted two sets of multiple regression analyses to examine to what degree perfectionism scores predicted attitudes towards sport psychology support and mental health support in athletes. In the first set of regressions, the subscales measuring attitudes towards sport psychology support were the dependent variables and PS and PC were entered

simultaneously as predictors. In the second set of regressions, the subscales measuring attitudes towards mental health support were the dependent variables and PS and PC were entered simultaneously as predictors. The results of these analyses are reported in Table 2 and summarized below.

### **Attitudes Towards Sport Psychology Support**

Confidence: PS positively predicted confidence in sport psychology support ( $\beta = .252, p = .015$ ) whereas PC did not predict confidence in sport psychology support ( $\beta = -.038, p = .710$ ). In total, 5% of the variance of the model was explained by perfectionism ( $R^2 = .052, p = .013$ ).

Stigma Tolerance: PS negatively predicted stigma tolerance ( $\beta = -.256, p = .009$ ) whereas PC was a positive predictor of stigma tolerance towards sport psychology support ( $\beta = .527, p < .001$ ). In total, 16% of the variance of the model was explained by perfectionism ( $R^2 = .162, p < .001$ ).

Personal Openness: PS was a negative predictor of personal openness towards sport psychology support ( $\beta = .027, p = .792$ ) whereas PC was a positive predictor of personal openness towards sport psychology support ( $\beta = .223, p = .031$ ). In total, 6% of the variance of the model was explained by perfectionism ( $R^2 = .059, p = .007$ ).

### **Attitudes Towards Mental Health Support**

Psychological Openness: PS was a negative predictor of psychological openness towards mental health support ( $\beta = -.069, p = .496$ ) whereas PC was a positive predictor of psychological openness towards mental health support ( $\beta = .338, p < .001$ ). In total, 9% of the variance of the model was explained by perfectionism ( $R^2 = .087, p < .001$ ).

Help-Seeking Propensity: PS was a positive predictor of help-seeking propensity towards mental health support ( $\beta = .311, p = .003$ ) whereas PC was a negative predictor of

help-seeking propensity towards mental health support ( $\beta = -.252, p = .015$ ). In total, 6% of the variance of the model was explained by perfectionism ( $R^2 = .055, p = .010$ ).

Indifference to Stigma: PS was a negative predictor of indifference to stigma towards mental health support ( $\beta = -.197, p = .042$ ) whereas PC was a positive predictor of indifference to stigma towards mental health support ( $\beta = .519, p < .001$ ). In total, 17% of the variance of the model was explained by perfectionism ( $R^2 = .171, p < .001$ ).

### **Discussion**

The aim of the present study was to provide the first examination of whether perfectionism predicts attitudes towards sport psychology support and mental health support in athletes. In agreement with our hypotheses, PS predicted positive attitudes towards sport psychology support and mental health support. Specifically, PS negatively predicted stigma tolerance towards both sport psychology support and mental health support, and positively predicted confidence in sport psychology support and help-seeking propensity towards mental health support. By contrast, PC predicted negative attitudes towards sport psychology support and mental health support. Specifically, PC positively predicted psychological and personal closedness and stigma to both sport psychology support and mental health support and negatively predicted help-seeking propensity towards mental health support.

#### **Perfectionism and Attitudes Towards Sport Psychology Support**

The present findings provide the first evidence that perfectionism is important for athletes' attitudes towards sport psychology support. In agreement with previous research on perfectionism and problematic attitudes in athletes such as the use of banned substances (Madigan et al., 2019), this appears to only be the case for PC. Previous research has found that PC is associated with higher levels of fear, negative judgement from others and a sense of inadequacy which are factors that could be responsible for this finding. Therefore, while research suggests that athletes higher in PC are likely to experience issues that could be

addressed with the support of a sport psychology consultant (e.g., negative pre-competition emotions; Donachie, Hill, & Madigan, 2019), athletes with higher levels of PC are less likely to seek sport psychology support and be more likely to show ambivalence towards this type of support. In this regard, the perfectionistic athletes who might benefit most from sport psychology support are the least likely to seek it out.

In contrast to the findings for PC, PS was positively related to more positive attitudes towards sport psychology support; notably, higher confidence and lower stigma. This finding aligns with the idea that athletes higher in PS may well utilize all strategies at their disposal in order to perform perfectly (Stoll et al., 2008). PS was also unrelated to apprehensiveness and fear of negative evaluation of others that is instrumental to more negative attitudes and lower help-seeking behaviour (Castaldelli-Maia et al., 2019). This bodes well in regards to whether athletes are likely to seek psychological support and how they might respond to it when offered. The finding that athletes higher in PS might be more likely to seek support to improve their performances is also an additional explanation for the observed performance benefits of PS worthy of further consideration in future research (e.g., Vink & Raudsepp, 2020).

### **Perfectionism and Attitudes Towards Mental Health Support**

As with sport psychology support, perfectionism predicted attitudes towards mental health support. This is the first evidence that perfectionism may affect the way athletes deal with mental health difficulties. In this regard, again, athletes higher in PC showed greater stigma towards mental health support. This is in line with research outside of sport that has found a similar impact of PC on help-seeking (Dang et al., 2020). Stigma is thought to be the main factor that inhibits help-seeking (Breslin, Shannon, Ferguson, Devlin, Haughey, & Prentice, 2019). As such, athletes higher in PC may be more likely to resign themselves to living with their mental ill health and suffer than to seek help because of a fear of being

judged negatively by others. This effect will likely be compounded by the fact athletes higher in PC also show greater closedness, meaning that if support services reach out to them, they may not acknowledge their problems and show less willingness to discuss them.

Similar to sport psychology support, PS was related to more positive attitudes towards seeking help for mental health. This is consistent with findings in an education setting among students (e.g., Dang et al., 2020). PS therefore does not appear to be problematic in the same manner as PC and includes some features that may encourage help-seeking. Seeking support in this way sits alongside other positive coping behaviours found in studies with athletes such as higher problem-focused coping, self-compassion and optimism (e.g., Lizmore et al., 2017). It is important to acknowledge that more positive attitudes towards mental health is a welcome finding in this regard. This is because there is evidence outside of sport that some indicators of PS are associated with a range of clinical outcomes (e.g., suicide ideation; Smith et al., 2018). Little research examining these associations has taken place in sport but one might expect similar findings. Therefore, some athletes higher in PS will need mental health support. Based on the current findings, in contrast to athletes higher in PC, they may also be more likely to seek it out and be receptive to this type of support when offered.

### **Clinical Implications**

The present findings lend themselves to several clinical implications. The first of which is to highlight to sport psychologists that they may need to adapt their current practice when supporting or in close contact with athletes who are higher in PC. With these athletes less likely to seek support, sport psychologists may need to provide extra support and care with an intention of building stronger, more positive attitudes towards sport psychology. One way to do so would be to adapt earlier phases of any intervention. This might be achieved by using Motivational Interviewing (MI; Miller & Rollnick, 2013) or similar techniques (e.g.,



person-centered counselling; Rogers, 1987), which places the emphasis on relationship-building over content (Mack, Breckon, O'Halloran, & Butt, 2019).

A second clinical implication is to adopt different interventions specifically for perfectionistic athletes with their poorer attitudes in mind (e.g., high stigma, higher closedness). Once these athletes show more engagement, potential interventions that could be successful in reducing stigma and increasing openness include online counselling (Bird, Chow, Meir, & Freeman, 2018) and brief psycho-education workshops (Saporito, Ryan, & Teachman, 2011). Self-help techniques may also be useful and effective in this regard particularly in the initial stages of applied work with perfectionistic athletes before more formal work (Donachie & Hill, 2020).

A third clinical implication would be to develop and support coaches and support staff in their own development to recognize athletes who need support but have not sought it. Sometimes referred to as “mental health first aiders”, these individuals can provide initial support and direct individuals for additional support when required (Hadlaczky, Hökby, Mkrtchian, Carli, & Wasserman, 2014). This is achieved by upskilling existing practitioners or establishing new roles to directly support people with mental health issues (Kitchener & Jorm, 2002).

### **Limitations and Future Research**

The present study has several limitations. First, our study focused on a sample comprised exclusively of university athletes. The findings therefore may not generalize beyond the present context. Future research should reexamine the present relationships in populations other than university athletes such as youth athletes and more elite athletes. Second, the present study adopted a cross-sectional design. This type of design provides a snapshot of possible relationships between the variables of interest but limited evidence in regard to causation. To overcome this, future research could adopt longitudinal designs so as

to establish temporal precedence between perfectionism and help-seeking attitudes. Finally, we examined attitudes. Whereas attitudes form the basis for action (Cooper, Mirabile, & Scher, 2005), we did not measure actual behaviours. Future research would therefore also benefit from measuring help-seeking behaviours directly.

### **Conclusion**

The present findings suggest that perfectionism is linked to attitudes towards sport psychology support and mental health support in athletes. In this regard, higher PC was related to more negative attitudes towards sport psychology support and mental health support, whereas PS was related to more positive attitudes. The findings suggest that athletes who have higher levels of PC are less likely to seek support for both performance and mental health problems and applied practices may need to be adjusted when working with perfectionistic athletes.

### References

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Sage Publications, Inc.
- Anderson, A. G., Hodge, K. P., Lavalley, D., & Martin, S. B. (2004). New Zealand athletes' attitudes towards seeking sport psychology consultation. *The New Zealand Journal of Psychology, 33*(3), 129-136.
- Barnard, J. D. (2016). Student-athletes' perceptions of mental illness and attitudes toward help-seeking. *Journal of College Student Psychotherapy, 30*(3), 161-175.  
<https://doi.org/10.1080/87568225.2016.1177421>
- Bauman, N. J. (2016). The stigma of mental health in athletes: Are mental toughness and mental health seen as contradictory in elite sport? *British Journal of Sports Medicine, 50*, 135-136. <https://doi.org/10.1136/bjsports-2015-095570>
- Bird, M. D., Chow, G. M., Meir, G., & Freeman, J. (2018). Student-athlete and student non-athletes' stigma and attitudes toward seeking online and face-to-face counselling. *Journal of Clinical Sport Psychology, 12*(3), 347-364.  
<https://doi.org/10.1123/jcsp.2017-0010>
- Breslin, G., Shannon, S., Ferguson, K., Devlin, S., Haughey, T., & Prentice, G. (2019). Predicting athlete mental health stigma using the theory of reasoned action framework. *Journal of Clinical Sport Psychology, 13*(1), 103-115.  
<https://doi.org/10.1123/jcsp.2017-0055>
- Castaldelli-Maia, J. M., e Gallinaro, J. G. D. M., Falcão, R. S., Goutteborge, V., Hitchcock, M. E., Hainline, B., ... & Stull, T. (2019). Mental health symptoms and disorders in elite athletes: A systematic review on cultural influencers and barriers to athletes seeking treatment. *British Journal of Sports Medicine, 53*(11), 707-721.  
<https://doi.org/10.1136/bjsports-2019-100710>

- Choudhry, F. R., Mani, V., Ming, L. C., & Khan, T. M. (2016). Beliefs and perception about mental health issues: A meta-synthesis. *Neuropsychiatric Disease and Treatment*, *12*, 2807-2818. <https://doi.org/10.2147/NDT.S111543>
- Cooper, J., Mirabile, R., & Scher, S. J. (2005). Actions and attitudes: The theory of cognitive dissonance. In T. C. Brock & M. C. Green (Eds.), *Persuasion: Psychological insights and perspectives* (pp. 63-79). Thousand Oaks, CA: Sage.
- Dang, S. S., Quesnel, D. A., Hewitt, P. L., Flett, G. L., & Deng, X. (2020). Perfectionistic traits and self-presentation are associated with negative attitudes and concerns about seeking professional psychological help. *Clinical Psychology and Psychotherapy*, *27*(5), 621-629. <https://doi.org/10.1002/cpp.2450>
- Donachie, T. C., & Hill, A. P. (2020). Helping soccer players help themselves: Effectiveness of a psychoeducational book in reducing perfectionism. *Journal of Applied Sport Psychology*, *32*, 1-21. <https://doi.org/10.1080/10413200.2020.1819472>
- Donachie, T. C., Hill, A. P., & Madigan, D. J. (2019). Perfectionism and precompetition emotions in youth footballers: A three-wave longitudinal test of the mediating role of perfectionistic cognitions. *Journal of Sport and Exercise Psychology*, *41*(5), 309-319. <https://doi.org/10.1123/jsep.2018-0317>
- Dunkley, D. M., Zuroff, D. C., & Blankstein, K. R. (2003). Self-critical perfectionism and daily affect: Dispositional and situational influences on stress and coping. *Journal of Personality and Social Psychology*, *84*(1), 234-252. <https://doi.org/10.1037/0022-3514.84.1.234>
- Dunn, J. G. H., Gotwals, J. K., Dunn, J. C., Selzler, A.-M., Lizmore, M. R., Vaartstra, M., ... Gamache, V. E. (2016). A multi-sample investigation of the higher-order latent

- dimensionality of the Sport-Multidimensional Perfectionism Scale-2. *Psychology of Sport and Exercise*, 27, 150–156. <https://doi.org/10.1016/j.psychsport.2016.08.006>
- Enns, M. W., Cox, B. J., Sareen, J., & Freeman, P. (2001). Adaptive and maladaptive perfectionism in medical students: A longitudinal investigation. *Medical Education*, 35(11), 1034-1042. <https://doi.org/10.1111/j.1365-2923.2001.01044.x>
- Fazio, R. H., & Petty, R. E. (2008). *Attitudes: Their structure, function, and consequences*. Psychology Press.
- Foskett, R. L., & Longstaff, F. (2018). The mental health of elite athletes in the United Kingdom. *Journal of Science and Medicine in Sport*, 21(8), 765-770. <https://doi.org/10.1016/j.jsams.2017.11.016>
- Frost, R. O., & Marten, P. A. (1990). Perfectionism and evaluative threat. *Cognitive Therapy and Research*, 14(6), 559-572. <https://doi.org/10.1007/BF01173364>
- Gotwals, J. K., & Dunn, J. G. (2009). A multi-method multi-analytic approach to establishing internal construct validity evidence: The Sport Multidimensional Perfectionism Scale 2. *Measurement in Physical Education and Exercise Science*, 13(2), 71-92. <https://doi.org/10.1080/10913670902812663>
- Graham, J. W., Cumsille, P. E., & Elek-Fisk, E. (2003). Methods for handling missing data. In J. A. Schinka & W. F. Velicer (Eds.), *Handbook of psychology: Research methods in psychology (Vol. 2, pp. 87-114)*. New York, NY: Wiley.
- Hadlaczky, G., Hökby, S., Mkrтчian, A., Carli, V., & Wasserman, D. (2014). Mental Health First Aid is an effective public health intervention for improving knowledge, attitudes, and behaviour: A meta-analysis. *International Review of Psychiatry*, 26(4), 467-475. <https://doi.org/10.3109/09540261.2014.924910>

- Hepler, J., & Albarracín, D. (2013). Attitudes without objects: Evidence for a dispositional attitude, its measurement, and its consequences. *Journal of Personality and Social Psychology, 104*(6), 1060-1076. <https://doi.org/10.1037/a0032282>
- Hill, A. P., Appleton, P. R., & Mallinson-Howard, S. H. (2016). Development and initial validation of the Performance Perfectionism Scale for Sport (PPS-S). *Journal of Psychoeducational Assessment, 34*(7), 653-669. <https://doi.org/10.1177/0734282916651354>
- Hill, A. P., Hall, H. K., & Appleton, P. R. (2010). Perfectionism and athlete burnout in junior elite athletes: The mediating role of coping tendencies. *Anxiety, Stress, & Coping, 23*(4), 415-430. <https://doi.org/10.1080/10615800903330966>
- Hill, A. P., Mallinson-Howard, S. H., & Jowett, G. E. (2018). Multidimensional perfectionism in sport: A meta-analytical review. *Sport, Exercise, and Performance Psychology, 7*(3), 235-270. <https://doi.org/10.1037/spy0000125>
- Kitchener, B. A., & Jorm, A. F. (2002). Mental health first aid training for the public: Evaluation of effects on knowledge, attitudes and helping behavior. *BMC Psychiatry, 2*(10), 1-6. <https://doi.org/10.1186/1471-244X-2-10>
- Lizmore, M. R., Dunn, J. G., & Dunn, J. C. (2017). Perfectionistic strivings, perfectionistic concerns, and reactions to poor personal performances among intercollegiate athletes. *Psychology of Sport and Exercise, 33*, 75-84. <https://doi.org/10.1016/j.psychsport.2017.07.010>
- Mack, R. J., Breckon, J. D., O'Halloran, P. D., & Butt, J. (2019). Enhancing athlete engagement in sport psychology interventions using Motivational Interviewing: A case study. *The Sport Psychologist, 33*(2), 159-168. <https://doi.org/10.1123/tsp.2018-0053>

- Mackenzie, C. S., Knox, V. J., Gekoski, W. L., & Macaulay, H. L. (2004). An adaptation and extension of the attitudes toward seeking professional psychological help scale. *Journal of Applied Social Psychology, 34*(11), 2410-2433.  
<https://doi.org/10.1111/j.1559-1816.2004.tb01984.x>
- Madigan, D. J., Mallinson-Howard, S. H., Grugan, M. C., & Hill, A. P. (2019). Perfectionism and attitudes towards doping in athletes: A continuously cumulating meta-analysis and test of the 2× 2 model. *European Journal of Sport Science, 20*(9), 1245-1254.  
<https://doi.org/10.1080/17461391.2019.1698660>
- Madigan, D. J., Stoeber, J., & Passfield, L. (2016). Perfectionism and changes in athlete burnout over three months: Interactive effects of personal standards and evaluative concerns perfectionism. *Psychology of Sport and Exercise, 26*, 32-39.  
<https://doi.org/10.1016/j.psychsport.2016.05.010>
- Martin, S. B. (2005). High school and college athletes' attitudes toward sport psychology consulting. *Journal of Applied Sport Psychology, 17*(2), 127-139.  
<https://doi.org/10.1080/10413200590932434>
- Martin, S. B., Kellmann, M., Lavalley, D., & Page, S. J. (2002). Development and psychometric evaluation of the Sport Psychology Attitudes—Revised Form: A multiple group investigation. *The Sport Psychologist, 16*(3), 272-290.  
<https://doi.org/10.1123/tsp.16.3.272>
- Martin, S. B., Lavalley, D., Kellmann, M., & Page, S. J. (2004). Attitudes toward sport psychology consulting of adult athletes from the United States, United Kingdom, and Germany. *International Journal of Sport and Exercise Psychology, 2*(2), 146-160.  
<https://doi.org/10.1080/1612197X.2004.9671738>
- Martin, S. B., Wrisberg, C. A., Beitel, P. A., & Lounsbury, J. (1997). NCAA Division I athletes' attitudes toward seeking sport psychology consultation: The development of

- an objective instrument. *The Sport Psychologist*, *11*(2), 201-218.  
<https://doi.org/10.1123/tsp.11.2.201>
- Miller, W. R., & Rollnick, S. (2013). *Motivational interviewing: Helping people change (applications of motivational interviewing)*. Guilford Press.
- Ong, N. C., & Harwood, C. (2018). Attitudes toward sport psychology consulting in athletes: Understanding the role of culture and personality. *Sport, Exercise, and Performance Psychology*, *7*(1), 46-59. <https://doi.org/10.1037/spy0000103>
- Reardon, C. L., Hainline, B., Aron, C. M., Baron, D., Baum, A. L., Bindra, A., ... & Derevensky, J. L. (2019). Mental health in elite athletes: International Olympic Committee consensus statement (2019). *British Journal of Sports Medicine*, *53*(11), 667-699. <https://doi.org/10.1136/bjsports-2019-100715>
- Rogers, C. R. (1987). The underlying theory: Drawn from experience with individuals and groups. *Counseling and Values*, *32*(1), 38-46. <https://doi.org/10.1002/j.2161-007X.1987.tb00689.x>
- Saporito, J. M., Ryan, C., & Teachman, B. A. (2011). Reducing stigma toward seeking mental health treatment among adolescents. *Stigma Research and Action*, *1*(2), 9-21. <https://doi.org/10.5463/sra.v1i2.26>
- Shafique, N., Gul, S., & Raseed, S. (2017). Perfectionism and perceived stress: The role of fear of negative evaluation. *International Journal of Mental Health*, *46*(4), 312-326. <https://doi.org/10.1080/00207411.2017.1345046>
- Shannon, A., Goldberg, J. O., Flett, G. L., & Hewitt, P. L. (2018). The relationship between perfectionism and mental illness stigma. *Personality and Individual Differences*, *126*, 66-70. <https://doi.org/10.1016/j.paid.2018.01.022>
- Smith, M. M., Sherry, S. B., Chen, S., Saklofske, D. H., Mushquash, C., Flett, G. L., & Hewitt, P. L. (2018). The perniciousness of perfectionism: A meta-analytic review of



- the perfectionism–suicide relationship. *Journal of Personality*, 86(3), 522-542.  
<https://doi.org/10.1111/jopy.12333>
- Stoeber, J., & Janssen, D. P. (2011). Perfectionism and coping with daily failures: Positive reframing helps achieve satisfaction at the end of the day. *Anxiety, Stress & Coping*, 24(5), 477-497. <https://doi.org/10.1080/10615806.2011.562977>
- Stoeber, J., & Madigan, D. J. (2016). Measuring perfectionism in sport, dance, and exercise: Review, critique, recommendations. In A. P. Hill (Eds.), *The psychology of perfectionism in sport, dance and exercise* (pp. 31-56). London: Routledge.
- Stoeber, J., & Otto, K. (2006). Positive conceptions of perfectionism: Approaches, evidence, challenges. *Personality and Social Psychology Review*, 10(4), 295-319.  
[https://doi.org/10.1207/s15327957pspr1004\\_2](https://doi.org/10.1207/s15327957pspr1004_2)
- Stoeber, J., Otto, K., Pescheck, E., Becker, C., & Stoll, O. (2007). Perfectionism and competitive anxiety in athletes: Differentiating striving for perfection and negative reactions to imperfection. *Personality and Individual Differences*, 42(6), 959-969.  
<https://doi.org/10.1016/j.paid.2006.09.006>
- Stoll, O., Lau, A., & Stoeber, J. (2008). Perfectionism and performance in a new basketball training task: Does striving for perfection enhance or undermine performance? *Psychology of Sport and Exercise*, 9(5), 620-629.  
<https://doi.org/10.1016/j.psychsport.2007.10.001>
- Tabachnick, B. G., & Fidell, L. S. (2007). *Experimental designs using ANOVA*. Belmont, CA: Thomson/Brooks/Cole.
- Vink, K., & Raudsepp, L. (2020). Longitudinal associations between perfectionistic strivings, perfectionistic concerns, and sport-specific practice in adolescent volleyball players. *Perceptual and Motor Skills*, 127(3), 609-625.  
<https://doi.org/10.1177/0031512520908699>

- Wahto, R. S., Swift, J. K., & Whipple, J. L. (2016). The role of stigma and referral source in predicting college student-athletes' attitudes toward psychological help-seeking. *Journal of Clinical Sport Psychology, 10*(2), 85-98.  
<https://doi.org/10.1123/JCSP.2015-0025>
- Watson, J. C. (2005). College student-athletes' attitudes toward help-seeking behavior and expectations of counselling services. *Journal of College Student Development, 46*(4), 442-449. <https://doi.org/10.1353/csd.2005.0044>
- World Health Organisation. (2018). *Mental health: Strengthening our response*.  
<https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response>.

Table 1

*Descriptive Statistics, Bivariate Correlations, and Cronbach's Alphas*

Variable	1	2	3	4	5	6	7	8	9
1. Perfectionistic strivings									
2. Perfectionistic concerns	.67***								
3. Attitudes towards sport psychology confidence	.23**	.13							
4. Attitudes towards sport psychology cultural preference	.11	.19**	.06						
5. Attitudes towards sport psychology stigma	.10	.35***	-.02	.44***					
6. Attitudes towards sport psychology personal openness	.17*	-.24**	-.05	.35***	.46***				
7. Attitudes towards mental health psychological openness	.16*	-.29***	-.02	.35***	.48***	.78***			
8. Attitudes towards mental health help-seeking	.14	-.04	.44***	.02	-.13	-.12	-.09		
9. Attitudes towards mental health indifference to stigma	.15*	.38***	.00	.44***	.67***	.51***	.63***	-.14	
<i>M</i>	0.00	0.00	2.74	1.91	2.61	1.33	4.82	3.40	2.48
<i>SD</i>	0.83	0.84	0.81	0.75	0.64	0.85	1.00	1.44	1.30
Cronbach's alpha	.80	.80	.83	.73	.72	.80	.84	.81	.91

*Note.*  $N = 166$ . \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ . Two-tailed. Mean (*M*) of perfectionistic strivings and perfectionistic concerns are zero as they are the sum of standardized scores.

Table 2

*Regression Analysis of Perfectionism and Attitudes Towards Sport Psychology Support and Mental Health Support*

<b>Attitudes Towards Sport Psychology Support</b>					
Model	$\beta$	<i>B</i>	<i>S.E.</i>	<i>P</i>	BCa 95% CI
<b>DV: Confidence</b>					
<i>F</i> (2,163) = 4.48, <i>p</i> = .013; <i>R</i> <sup>2</sup> = .052					
Perfectionistic strivings	.252*	.305	.124	.015	[.060, .527]
Perfectionistic concerns	-.038	-.046	.124	.710	[-.293, .186]
<b>DV: Cultural Preference</b>					
<i>F</i> (2, 163) = 3.38, <i>p</i> = .036; <i>R</i> <sup>2</sup> = .040					
Perfectionistic strivings	-.048	-.084	.179	.641	[-.453, .261]
Perfectionistic concerns	.229*	.393	.178	.029	[.006, .767]
<b>DV: Stigma Tolerance</b>					
<i>F</i> (2, 163) = 15.78, <i>p</i> < .001, <i>R</i> <sup>2</sup> = .162					
Perfectionistic strivings	-.256 **	-.399	.151	.009	[-.712, -.052]

Perfectionistic concerns	.527***	.818	.150	.000	[.476, 1.181]
<b>DV: Personal Openness</b>					
$F(2, 163) = 5.08, p = .007; R^2 = .059$					
Perfectionistic strivings	.027	.036	.135	.792	[-.231, .293]
Perfectionistic concerns	.223*	.292	.134	.031	[.019, .565]
<b>Attitudes Towards Mental Health Support</b>					
<b>DV: Psychological Openness</b>					
$F(2, 163) = 7.81, p < .001; R^2 = .087$					
Perfectionistic strivings	-.069	-.062	.091	.496	[-.241, .142]
Perfectionistic concerns	.338***	.303	.091	.001	[.134, .471]
<b>DV: Help-Seeking Propensity</b>					
$F(2, 163) = 4.74, p = .010; R^2 = .055$					
Perfectionistic strivings	.311**	.242	.080	.003	[.082, .390]
Perfectionistic concerns	-.252*	-.196	.080	.015	[-.350, -.039]
<b>DV: Indifference to Stigma</b>					

---

$F(2, 163) = 16.83, p < .001; R^2 = .171$

Perfectionistic strivings	-.197*	-.203	.099	.042	[-.404, .009]
Perfectionistic concerns	.519***	.533	.099	.000	[.339, .716]

---

Note. N = 166. DV = dependent variable.  $\beta$  = standardised regression weight. B = unstandardized regression weight. S.E = standard error. BCa 95% CI = bias corrected accelerated 95% confidence intervals. \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ . Two-tailed.