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Perfectionism and Peer Victimisation in Youth Sport

by

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Abstract

Peer victimisation is a global issue affecting approximately 10-30% of youths and is often prevalent and more socially accepted in sport settings. Research has found perfectionism is associated with peer victimisation in a range of samples. What remains unknown is whether perfectionism predicts the perpetration of peer victimisation or being the victim in youth sport. The current study aimed to address this issue by examining the relationships between self-oriented perfectionism (demanding perfection of the self) other-oriented perfectionism (demanding perfection of others), socially prescribed perfectionism (perceiving that others demand perfection of the self) and peer victimisation among youth sport participants. Youth sports participants (n = 147, 49.0% males, age M = 13.76 years, SD = 1.39) completed measures of domain-specific and performance specific perfectionism (Hewitt & Flett, 1990; Hewitt et al. 2008; Hill, Appleton & Mallinson, 2016), and a measure of perpetrating and experiencing peer victimisation (Hunt, Peters & Rapee, 2012). Multiple regression analyses indicated, dependent on the measure used, other-oriented perfectionism was a positive predictor of physical victimisation, overall perpetration and physical perpetration ($p < .05$). Neither self-oriented perfectionism, nor socially prescribed perfectionism, were significant predictors of the perpetration of peer victimisation or being a victim ($p > .05$). These findings suggest that youth sport participants displaying characteristics of other-oriented perfectionism may be more likely to experience interpersonal difficulties (e.g. hostility and conflict) with their sporting peers.

Keywords: Perfectionism, peer victimisation, youth sports

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1. Introduction

It is well documented that participating in sport affords many desirable outcomes for young people. In particular, it can help develop their physical, psychological, and social well-being (e.g. improved cardiovascular function, confidence, and friendships) (Weiss, 2016). This is important because these outcomes contribute to their overall health (Allender, Cowburn & Foster, 2006). However, not all young people have positive experiences in sport (Evans et al. 2016). Sometimes sport can be an unsafe place where children and adolescents experience stress, hopelessness, and severe interpersonal difficulties (e.g. Stafford, Alexander & Fry, 2013). Peer victimisation is one of the most concerning examples of how such interpersonal difficulties can manifest for young people in sport.

Peer victimisation is a global issue with 100-600 million adolescents directly involved in bullying each year (Book, Volk & Hosker, 2012). It has been shown to have many negative and potentially serious physical, psychological, and social, consequences for both victims and perpetrators. For example, victims have been shown to be at a greater risk of anxiety, depression, and suicidal thoughts (Hawker & Boulton, 2000; van Geel, Vedder & Tanilon 2014). Perpetrators are also at risk of health problems because they have been shown to be more prone to substance abuse and criminality as well as poorer social adjustment and a difficulty forming satisfying relationships (Stuart & Jose, 2014; Evans et al. 2016). Due to the established relationship between peer victimisation and young people's health, it is important to understand factors which can predict experiences of peer

victimisation and perpetration in sport. Personality has previously been investigated as a predictor of peer victimisation. Certain aspects of personality, such as low levels of Honesty-Humility, have been found to be a predictor of perpetration behaviours (Book, Volk & Hosker, 2012). Perfectionism is a multidimensional personality trait that has previously been linked with aggressive behaviour and therefore may also be associated with peer victimisation and perpetration (Stoeber et al. 2017). This possibility has yet to be investigated. Thus, the aim of this study is to examine whether perfectionism predicts the perpetration of peer victimisation and being a victim in youth sport.

1.1 Multidimensional Perfectionism

Perfectionism is a construct with a long history. In its inception, perfectionism was conceptualised as unidimensional personality trait (Cha, 2016). Early theorists and practitioners identified particular features of perfectionism and being a perfectionist. For instance, Hollender (1965) defined perfectionism as "demanding of others or oneself a higher quality of performance than is required by the situation" (p.94). Missildine (1963) described a perfectionist as someone who pursues work systematically and strenuously, often to the point of exhaustion, and gains no lasting satisfaction from their efforts. Further, they feel they must still do better despite their efforts and potential successes (Missildene, 1963). Importantly, perfectionists were said to differ from people who pursue high standards, because people who pursue high standards can take pleasure from the results of painstaking effort and be less precise when the situation allows (Hollender, 1965). Consistent with this notion, Burns (1983) stated that

perfectionism was not the same as a 'healthy pursuit of excellence' and that it involves a compulsive and relentless pursuit of unrealistically high objectives. Rather than using errors as an opportunity to learn and grow, perfectionists will continuously punish themselves (Burns, 1983). Overall, these early definitions suggested that perfectionism solely entails negative self-related cognitions, irrational beliefs, and dysfunctional attitudes and is fundamentally negative (Hall, 2006).

Perfectionism is now conceptualised as a multidimensional construct consisting of both intrapersonal and interpersonal components. Many attempts have been made to define perfectionism in this way but there is no single agreed upon definition (Shafran, Cooper & Fairburn, 2002; Gotwals & Dunn, 2009). Contemporary theorists and researchers usually define perfectionism as a relatively stable personality trait, which includes setting and striving for exceedingly high standards along with the tendencies to be overly critical with evaluations of one's behaviour and exhibiting concerns over mistakes (Frost et al. 1990; Flett & Hewitt, 2002; Stoeber & Stoeber, 2009). It has been argued that having concerns about mistakes is more central to the definition of perfectionism than high standards (Frost et al. 1990; Greenspon, 2000). Those who pursue high standards, appear well organised, but are not overly concerned with making mistakes are thought to demonstrate adaptive patterns of motivation rather than perfectionism (Hall, 2006). Thus, concerns over making mistakes coupled with the pursuit of high standards are what make perfectionism distinct from other forms of achievement striving.

1.1.1 Multidimensional measures of perfectionism.

In order to capture the multidimensional nature of perfectionism, Frost et al. (1990) were the first to develop a Multidimensional Perfectionism Scale (F-MPS). Their self-report measure consists of six dimensions of perfectionism. These are personal standards (the pursuit of exceedingly high standards of performance), concern over mistakes (fear about making mistakes and the negative consequences for self-evaluation), doubts about actions (indecisiveness related to the uncertainty about doing the right thing), organisation (tendencies to value order and neatness), parental expectations (perceived expectations from parents to be perfect), and parental criticism (perceptions of parents being critical if their expectations are not met). It has since been concluded that organisation should not be included when considering overall perfectionism. This is because organisation, while closely associated with perfectionism, is not a defining component of perfectionism (Frost et al. 1990). In addition, parental expectations and criticism are also often considered antecedents rather than central concepts of perfectionism (Stoeber & Madigan, 2016).

At the same time as Frost et al. (1990), Hewitt and Flett (1991) developed a Multidimensional Perfectionism Scale (HF-MPS). Their self-report measure includes three dimensions of perfectionism; namely, self-oriented perfectionism, socially prescribed perfectionism and other-oriented perfectionism. Self-oriented perfectionism includes internally motivated beliefs and behaviours, such as setting and striving for extremely high personal standards, rigorously evaluating the self, and being highly critical when failing to meet personal expectations (Hewitt & Flett,

1991). For socially prescribed perfectionism, striving for perfection is important to

an individual because significant others are perceived to hold unrealistic

perfectionistic standards for them and judge them harshly when their standards are

not attained (Hewitt & Flett, 1991). Other-oriented perfectionism is another

interpersonal dimension that involves expecting significant others to be perfect and

being highly disapproving of those who fail to meet perfectionistic expectations

(Hewitt & Flett, 1991). As such, Hewitt and Flett's (1991) model focuses more on

the relational quality of perfectionism rather than the discrete characteristics of

perfectionism that Frost et al.'s (1990) model captures. Aligned with the commonly

adopted definition of perfectionism, each dimension also pertains to high

perfectionistic standards and critical evaluative concerns.

1.1.2 Domain-specific multidimensional measures of perfectionism.

Regardless of the multidimensional approach adopted, both Frost et al.'s

(1990) and Hewitt and Flett's (1991) measures of perfectionism assess

perfectionism as a general personality trait across life domains. However, it has

since been argued that perfectionism may only manifest in certain areas of people's

lives (Dunn, Gotwals & Causgrove Dunn, 2005). In a sample of student-athletes,

Dunn, Gotwals and Causgrove Dunn (2005) found that, on average, the sample

demonstrated greater perfectionistic tendencies in sport, than in school and in

general. The proposed reason for this was that the student-athletes perceived a

greater likelihood of success in sport and were more likely to set higher standards

for this domain (Dunn, Gotwals & Causgrove Dunn, 2005). Further support for the

domain-specific nature of perfectionism has been shown. McArdle (2010) sampled

academically talented youth and found that they had higher perfectionistic

tendencies in the academic domain over the sport domain. In addition, Dunn et al.

(2011) found that a domain-specific measure of perfectionism had greater

predictive ability within its corresponding domain (e.g. sport) than global measures.

Taken together, these findings suggest that perfectionism can differ between

domains and that the manifestation of perfectionism may be dependent on the

population sampled and the value and importance they place on the specific

domain (Stoeber & Stoeber, 2009). Hence, it has been suggested that it is important

to conceive of perfectionism as domain-specific, and use a domain-specific rather

than a global measure (Stoeber & Madigan, 2016).

The first domain-specific multidimensional measure of perfectionism in

sport was devised by Dunn, Causgrove Dunn and Syrotuik (2002). They used the

model by Frost et al. (1990) and adapted it to the sport domain to create the Sport

Multidimensional Perfectionism Scale (Sport-MPS). The Sport-MPS comprises four

dimensions of perfectionism. These are personal standards, concern over mistakes,

perceived parental pressure, and perceived coach pressure. It does not include

doubts about actions and organisation. This is because there were concerns about

the internal consistency and face validity of the subscales for these two dimensions

(Dunn, Causgrove Dunn & Syrotuik, 2002). It also includes a new dimension that

relates specifically to the sport domain called perceived coach pressure (perceived

expectations from a coach and criticism if their expectations are not met). Dunn,

Causgrove Dunn and Syrotuik (2002) also combined parental expectations and

parental criticism from the Frost et al. (1990) model to create perceived parental

pressure (perceived expectations from parents and criticism if their expectations are not met).

Some criticisms have been levelled at the Sport-MPS. In particular, it has been argued that the Sport-MPS underrepresented multidimensional perfectionism because it omitted doubts about actions and organisation (Gotwals & Dunn, 2009). Therefore, Gotwals and Dunn (2009) developed a revised version of the scale called the Sport Multidimensional Perfectionism Scale 2 (Sport-MPS-2). This revised scale includes six items for doubts about actions and six items for organisation. The doubts about actions subscale measures the "degree to which athletes are uncertain about, or dissatisfied with, their training in preparation for competition" (Gotwals & Dunn, 2009, p.74). The organisation subscale measures an athlete's tendency or desire to implement plans or routines that dictate their behaviour prior to and during competition (Gotwals & Dunn, 2009). These subscales differ to the original Frost et al. (1990) model to ensure they are more applicable to sport. However, in keeping with Frost et al. (1990), organisation is still not considered a defining component and scores for organisation are not used as part of the overall scoring for perfectionism. Due to consistently demonstrating high validity and reliability, the Sport-MPS and its revised version have become the most widely used in the perfectionism in sport literature to date (Jowett, Mallinson & Hill, 2016; Stoeber & Madigan, 2016).

The next most commonly used measurement approach is to adapt the instructions, stem sentence, and items of the HF-MPS to focus on sport. For example, an item measuring socially prescribed perfectionism would be adapted to

'*My teammates* [instead of others] *expect nothing less than perfection from me'*

(Hill et al. 2014). Due to the theoretical completeness of the Hewitt and Flett (1991)

model, it has been suggested that this may be a more appropriate approach than

using measures adapted from Frost et al. (1990). Research has demonstrated that

adapting the HF-MPS has good predictive ability and satisfactory validity and

reliability (Stoeber & Madigan, 2016); however, there are still some drawbacks to

consider. For instance, once the items have been amended; it is unclear whether

the instrument fully captures perfectionism in sport or whether all items are

applicable in the sport context (Hill, Appleton & Mallinson, 2016). Another

disadvantage of adapting the HF-MPS is that it contains a number of reverse-scored

items. According to Stoeber and Madigan, (2016) disagreeing with statements

allowing for imperfection may not be the same as agreeing to statements requiring

perfection. Although revised versions of Hewitt and Flett's (1991) measure have

successfully been used with reverse-scored items (e.g. Mallinson & Hill, 2011), it is

more appropriate to use measures without reverse-scoring (Stoeber, 2016).

In addressing the limitations of adapting the HF-MPS, Hill, Appleton and

Mallinson, (2016) recently devised a performance-specific measure of

perfectionism based on Hewitt and Flett's model. The measure is called, the

Performance Perfectionism Scale-Sport (PPS-S) and captures self-oriented

performance perfectionism, socially prescribed performance perfectionism, and

other-oriented performance perfectionism. Self-oriented performance

perfectionism refers to the demand for perfect athletic performances from the self

and to rigorously evaluate and harshly criticise one's own performances (Hill,

Appleton & Mallinson, 2016). Socially prescribed performance perfectionism is defined as perceiving that others have extremely high standards for one's athletic performances and that one will be critically evaluated by others whilst attempting to reach those standards (Hill, Appleton & Mallinson, 2016). Other-oriented performance perfectionism is described as demanding perfect athletic performances from others and criticising others when they fail to reach one's expectations (Hill, Appleton & Mallinson, 2016). Therefore, this measure goes further than a focus on the domain to concentrate on a specific aspect of the sporting domain (i.e., performance). As such, it may have the potential to provide greater context than the domain-specific or general HF-MPS measures that have been used to date (Hill, Appleton & Mallinson, 2016). Beyond the findings of its validation paper, the possibility has yet to be explored and so will be examined in this study.

1.2 Multidimensional Perfectionism in Sport

Of the three dimensions of perfectionism posited by Hewitt and Flett, (1991) self-oriented perfectionism and socially prescribed perfectionism have most commonly been examined in sport research. In contrast, other-oriented perfectionism has received limited empirical attention (Stoeber, 2014). Recent reviews of literature and meta-analyses have demonstrated the divergent influence of self-oriented perfectionism and socially prescribed perfectionism. In the first narrative review, Stoeber (2011) considered self-oriented perfectionism as part of a higher-order construct of perfectionistic strivings, which are dimensions of perfectionism associated with setting and striving for extremely high standards.

Socially prescribed perfectionism was considered as part of a higher-order construct of perfectionistic concerns. Perfectionistic concerns capture concerns over mistakes, fear of other's negative evaluation, discrepancy between expectations and performance, and negative reactions to imperfection (Stoeber, 2011). The aim of the review was to show the difference between the two higher-order dimensions of perfectionism and their associations with emotions, motivation and sport performance. He reviewed 16 studies with competitive athletes that controlled for the overlap between perfectionistic strivings and perfectionistic concerns. It was concluded that when perfectionistic strivings (self-oriented perfectionism included) are not accompanied by perfectionistic concerns they have positive relationships with adaptive emotions (e.g. positive affect), and adaptive motivational orientations (e.g. mastery-approach) and enhance performance. However, perfectionistic concerns are positively associated with negative emotions (e.g. negative affect) and present a risk to the quality of motivation (e.g. mastery-avoidance).

In a follow-up systematic review, Gotwals et al. (2012) also considered self-oriented perfectionism as part of perfectionistic strivings but did not focus on socially prescribed perfectionism (or perfectionistic concerns). This is because the study aimed to examine the degree to which perfectionistic strivings in athletes are associated with perceived adaptive (e.g. task goals) and maladaptive (e.g. ego goals) characteristics, processes and outcomes. They reviewed 31 studies and found that when unpartialled from perfectionistic concerns, perfectionistic strivings had positive associations with both adaptive and maladaptive outcomes, such as

perceived ability, and angry reactions to mistakes. However, when perfectionistic

concerns were controlled for, perfectionistic strivings showed primarily positive

associations with adaptive outcomes only. Thus, perfectionistic strivings were

considered mainly positive, often neutral, and rarely negative for athlete emotions,

motivation, and other performance-related outcomes (Gotwals et al. 2012).

The series of reviews that followed were conducted by Hill and colleagues.

These included two systematic reviews and two meta-analyses (Hill & Curran, 2016;

Jowett, Mallinson & Hill, 2016; Hill, Jowett & Mallinson-Howard, 2018; Hill,

Mallinson-Howard & Jowett, 2018). Again, self-oriented perfectionism was

considered as part of perfectionistic strivings. Socially prescribed perfectionism was

considered as part of perfectionistic concerns. The aims of these reviews were to

illustrate the relationships between both perfectionistic strivings and perfectionistic

concerns and a wider range of motivation, emotional/well-being, and performance-

related variables in sport, dance, and exercise. Like Gotwals et al. (2012) the

process involved comparing the partialled and unpartialled correlations between

perfectionism dimensions and outcomes in relevant studies. The findings of these

reviews suggested that perfectionistic concerns undermine the quality of

motivation and are associated with personal and performance difficulties (e.g.

burnout). When partialled from perfectionistic strivings these associations remain

the same, if not become worse for perfectionistic concerns (Hill & Curran, 2016;

Jowett, Mallinson & Hill, 2016; Hill, Jowett & Mallinson-Howard. 2018; Hill,

Mallinson-Howard & Jowett, 2018). Perfectionistic strivings, however, are much

more complex and ambiguous showing an association with adaptive and

maladaptive outcomes in its unpartialled form. For instance, moderate effects were shown for positive affect (adaptive) and depressive symptoms (maladaptive). In its partialled form, there were fewer instances of positive associations with maladaptive outcomes and more instances of positive associations with adaptive emotional well-being, motivation and performance outcomes.

Based on the preceding, multidimensional perfectionism plays an important role in the experiences of athletes. In particular, perfectionism appears to be somewhat of a 'double-edged' sword (Jowett, Mallinson & Hill, 2016). Socially prescribed perfectionism is a predictor of negative intrapersonal experiences (poorer quality of motivation and emotions) and self-oriented perfectionism is comparatively less problematic. What is not clear from these reviews is how multidimensional perfectionism specifically relates to the experiences of young people in sport (those aged less than 25 years; NSPCC, 2017). Further, the social experiences of athletes have not been extensively examined; rather the focus has been on intrapersonal outcomes. The role of other-oriented perfectionism has also been neglected.

1.2.1 Multidimensional perfectionism and young people in sport.

To date, twelve studies have examined the influence of perfectionism among young people in sport. Initial studies focused on intrapersonal outcomes, such as body-related concerns, burnout, and motivation. In the first examination of perfectionism in youth athletes, Ferrand et al. (2007) found that self-oriented perfectionism was associated with dietary restraint and body dissatisfaction in female synchronised swimmers. Socially prescribed perfectionism was negatively

associated with appearance. Therefore, both dimensions of perfectionism had a negative relationship with body-esteem. Dunn et al. (2011) also examined perfectionism and body image. They found that in adolescent female figure skaters, high self-oriented perfectionism (as captured in perfectionistic strivings) combined with high socially prescribed perfectionism (as captured in perfectionistic concerns) was related to a negative body image. However, high self-oriented perfectionism combined with low socially prescribed perfectionism was associated with a positive body image. Thus, the findings supported the double-edged nature of perfectionism for youth athletes, particularly with respect to their sense of self.

Focusing on another detrimental psychological consequence of perfectionism for youth athletes, Hill et al. (2008) investigated burnout in adolescent male soccer players. The study found that self-oriented perfectionism was negatively associated with burnout while socially prescribed perfectionism was positively related to burnout. In developing this line of research, three further cross-sectional studies found that socially prescribed perfectionism was positively related with burnout in young elite male players, elite youth athletes, and deaf and hearing athletes (Appleton, Hall & Hill, 2009; Appleton & Hill, 2012; Ho et al. 2015). These studies have also demonstrated that, self-oriented perfectionism is either unrelated or negatively related to symptoms of burnout (Appleton, Hall & Hill, 2009; Appleton & Hill, 2012). Other studies have also demonstrated similar findings (Hill et al. 2010; Hill & Appleton, 2011; Hill, 2013). Thus, the findings again showed support for the double-edged nature of perfectionism for young athletes.

In attempts to explain the divergent relationships observed for self-oriented perfectionism and socially prescribed perfectionism, a number of motivational mechanisms have also been examined. For instance, self-oriented perfectionism has been shown to be positively related to intrinsic, introjected and external motivation and share a negative relationship with amotivation (Appleton & Hill, 2012). Socially prescribed perfectionism had no relation to intrinsic motivation but a positive relationship with extrinsic motivation and amotivation (Appleton & Hill, 2012). In addition, self-oriented perfectionism has a positive association with autonomy thwarting but no relation to competence or relatedness thwarting (Mallinson & Hill, 2011). Socially prescribed perfectionism has a positive relationship with autonomy, competence and relatedness need thwarting (Mallinson & Hill, 2011). Therefore, self-oriented perfectionism entails motives based on interest in the activity, but there is also a desire to participate in sport so to reinforce feelings of self-worth and avoid punishment, and a sense of choice and self-control in sport are undermined. Conversely, socially prescribed perfectionism entails either a lack of motivation or avoiding feelings of guilt and shame, and fear of punishment drive participation in sport. Psychological needs are also actively undermined.

In this line of research, the first examination of other-oriented perfectionism in terms of young people's sport experiences was offered. There was no significant relationship identified between other-oriented perfectionism and autonomy, competence or relatedness thwarting in youth sport participants (Mallinson & Hill, 2011). This is surprising as other-oriented perfectionism involves imposing

perfectionistic standards on others and so holds the potential to undermine a sense of relatedness and connectedness to others (Habke & Flynn, 2002). Other studies have, however, demonstrated that perfectionism plays an important role in the social outcomes of young people's sport experiences. In particular, the qualities of friendships with sport peers have been examined.

The first study to examine perfectionism and peer relationships was conducted by Ommundsen et al. (2005) in youth soccer players. They aimed to examine the relationship between achievement goals, motivational climate, perfectionism, and peer relations. They demonstrated that peer acceptance, companionship, and loyalty in friendships had a negative relationship with perfectionistic concerns (not measured using socially prescribed perfectionism but similar dimensions of concern over mistakes and doubts about actions). Perfectionistic strivings (not measured with self-oriented perfectionism but a similar dimension of personal standards) had a negative relationship with companionship and was unrelated to other friendship qualities. The findings suggest that although both dimensions of perfectionism have some negative associations with friendship quality, it is perfectionistic concerns that pose a greater risk in terms of interpersonal difficulties with peers.

In the second and final study to examine peer relationships, Mallinson et al. (2014) aimed to examine the relationship between perfectionism, and intrapersonal and interpersonal experiences in youth sport. They found perfectionistic concerns (not measured using socially prescribed perfectionism but similar dimensions of concern over mistakes and doubts about actions) displayed a

negative relationship with self-esteem enhancement and supportiveness in peer

friendships and a positive relationship with friendship conflict (Mallinson et al.

2014). However, perfectionistic strivings (not measured using self-oriented

perfectionism but a similar dimension of personal standards) had a positive

relationship with self-esteem enhancement and supportiveness, things in common,

companionship and pleasant play, and conflict resolution in peer friendships

(Mallinson et al. 2014). Therefore, it appears that perfectionism has the potential to

enhance and impair the quality of peer relationships in youth sport. What remains

unknown is whether multidimensional perfectionism extends to more harmful

interpersonal behaviours that are often associated with impaired quality in peer

relationships, such as bullying (Evans et al. 2016). One possible means to examine

this issue is to consider the relationships between perfectionism and peer

victimisation in youth sport.

1.3 Defining Peer Victimisation

Peer victimisation is a form of aggressive interpersonal behaviour (Finkelhor,

Turner & Hamby, 2012). Like perfectionism, there is no single agreed upon

definition of peer victimisation. It has been defined as a form of peer abuse in

which a person is frequently the target of peer aggression (Hunter, Boyle &

Warden, 2007). Peer victimisation has also been considered to be harm caused by

peers acting outside the norms of appropriate conduct (Finkelhor, Turner & Hamby,

2012). More recently, Troop-Gordon (2017) has described peer victimisation as the

experience of being the target of others' aggression, bullying and social exclusion.

Although peer victimisation is defined in slightly different ways, the definitions have

some common themes: 1) it occurs in peer groups, 2) involves harm and 3) the focus is more on the victim than the perpetrator.

Within the youth literature, peer victimisation is often used interchangeably with bullying (Hunter, Boyle & Warden, 2007). However, there are clear differences between the two behaviours. Bullying is a specific pattern of antisocial behaviour that is usually studied within the school context between children and adolescents (Evans et al. 2016). It has commonly been described as a form of aggression which is unprovoked, repeated, has the intention to harm and involves an imbalance of power between the victim and the perpetrator (Olweus, 1993). This definition has three main requirements: 1) intention to harm, 2) repetition, and 3) an imbalance of power. Therefore, an isolated fight or argument between two people of about equal strength would not be considered bullying as it fails to include a power imbalance and repetition (Smith et al. 2002). The requirement of repetition and imbalance of power thus differentiates bullying as a subset of aggression and type of peer victimisation (Smith et al. 2002; Hunter, Boyle & Warden, 2007).

Although Olweus' (1993) definition of bullying is frequently used within studies it has been criticised. Hunt, Peters and Rapee, (2012) state that victims may not be able to assess the intent of the aggressor. Intention to harm causes a problem because it is subjective and therefore, is difficult to measure (Donoghue & Raia-Hawrylak, 2016). In a focus group, students commented that acts labelled as cyber bullying are frequently attempts at humour that had unintended effects where the 'victim' takes more offense than what was originally intended (Cunningham et al. 2010). Olweus' (1993) definition suggests that the perpetrator's

intention is more important than the victim's perception of their behaviour. However, the victim may still experience adverse effects whether the perpetrator intended to harm or not. Thus, these acts would not be considered as bullying but would be included within peer victimisation.

Another issue with the standard definition of bullying is the requirement of repetition, especially when it comes to cyber bullying. Both Volk, Dane and Marini (2014) and Turner et al. (2015) comment that a single incident of cyber bullying can be accessed, shared, re-posted and commented on by many people for long periods of time. Therefore, one instance of cyber bullying can be very harmful to the victim (Turner et al. 2015). This issue is not limited to cyber bullying. For example, a one-off act of aggression could be severely traumatic but would not be captured under Olweus' definition (Volk, Dane & Marini, 2014). However, reports of peer victimisation could capture these incidents.

To address some of these issues, Volk, Dane and Marini (2014) have suggested a revision to the definition of bullying. They suggest it should be defined as aggressive, goal-directed behaviour that harms another individual within the context of a power imbalance. Therefore, their main requirements are; 1) goal-directedness, 2) power imbalance, and 3) harm, where harm is defined as a product of frequency, intensity and individual resilience. This definition removes intention to harm which has measurement issues due to it being subjective and replaces it with goal-directedness. Some examples of goals are; 1) to increase reputation and dominance, and 2) to gain access to resources such as food, or desired objects (Volk, Dane & Marini, 2014). Measuring goals helps to avoid inconsistencies with

proactive and reactive aggression and can be used to predict important outcomes

of bullying (Volk, Veenstra & Espelage, 2017). Harm builds on Olweus' (1993)

definition as it changes from repetition to include intensity as well as the frequency.

Therefore, a single act of aggression could be included within the definition as the

intensity may be enough to permanently change the psychology or behaviour of the

victim.

In the revision of the bullying definition the power imbalance is retained.

This feature is what differentiates bullying from other forms of aggression (Volk,

Veenstra & Espelage, 2017). Research has shown that an imbalance of power

makes the victims less likely to retaliate and leads to more severe outcomes (Volk,

Veenstra & Espelage, 2017). However, power can present in various ways (e.g.

physical strength, popularity) and where the imbalance lies can be subjective and

consequently, power imbalance is problematic to measure. As peer victimisation

does not have this requirement, the difficulty associated with measuring power

imbalance is avoided.

A further issue with the definition in regards to power imbalance is that

younger children may not make a distinction between bullying and fighting (Smith

et al. 2002). This is because younger children do not consider the power imbalance

requirement and therefore, they broaden the definition to cover bad behaviour

(Smith et al. 2002; Huang & Cornell, 2015). In self-report surveys, when children are

given the definition of bullying, they still often exclude power imbalance as a

requirement and include other forms of aggression in their reports (Huang &

Cornell, 2015). Events without a power imbalance between peers may still be

damaging and worthy of attention (Turner et al. 2015) but would not be included

using either the Olweus (1993) or Volk, Veenstra and Espelage, (2017) definition of

bullying.

In reviewing definitions of peer victimisation and bullying, there are a

number of methodological and definitional challenges including; 1) intention to

harm is subjective and therefore difficult to measure, 2) one off instances could be

equal to or more harmful than repeated instances (the challenge of measuring

frequency and/or intensity), 3) and power imbalance evades measurement and

people of equal standing can be aggressive to others. Therefore, this study will

consider and measure peer victimisation rather than the narrower construct of

bullying.

1.3.1 Roles within peer victimisation.

Peer victimisation occurs in social settings, within a peer group, and has

been described as a group process with many roles (Salmivalli, 2010). These roles

primarily include bullies (perpetrators), victims (targets), and bully-victims (both

perpetrators and targets). They can also include reinforcer(s) of the bully,

assistant(s) of the bully, defender(s) of the victim, and outsider(s). Reinforcers

provide positive feedback to perpetrators for example, by smiling or laughing at the

perpetrator's behaviour. Assistants are those that join in with the perpetrator's

actions. Defenders support the victims either at the event or comforting them

afterwards. Outsiders are those that ignore and withdraw from the situation

(Salmivalli, 2010). Despite the number of participant roles in peer victimisation, the

roles of perpetrator (bully) and victim are most frequently studied (Hong & Espelage, 2012).

In early research, the method typically used to capture these roles was to categorise youth who are at the extreme ends of the bullying scale and exclude those who report low or moderate levels of victimisation behaviour (Bosworth, Espelage & Simon, 1999). However, Bosworth, Espelage and Simon (1999) state that categorising youth in to these roles results in less precise measurement of victimisation behaviours. This is because the majority of youth are neither pure perpetrators nor pure victims (Hong & Espelage, 2012) Thus, recent studies have moved away from categorising children in this way, and instead measure perpetration and victimisation behaviours on a continuum. As such, the current study adopts the continuum approach.

1.3.2 Direct and indirect perpetration and victimisation.

As a form of aggressive behaviour, peer victimisation can be viewed in two ways, direct and indirect. Direct peer victimisation includes physical (damaging property, hitting, pushing, kicking and forcefully taking something from the victim) and verbal (harassment or intimidation, name-calling, threats and taunts) aggression (Shetgiri, 2013). Indirect peer victimisation can be categorised in to relational (damage to relationships, exclusion and manipulation of friendships) or social (lies, gossip, rumour spreading, damage to social standing and personal reputation) aggression (Shaw et al. 2013). Cyber peer victimisation is aggressive behaviour through the use of technology and could be direct or indirect as it could include verbal, relational or social means (Shaw et al. 2013).

Prevalence rates of being a victim or perpetrator of direct and indirect behaviours can be difficult to identify. Prevalence rates of perpetration tend to be lower than reports of victimisation. In terms of perpetration, a study of 1694 Swiss and Australian adolescents, found 12.8% of participants reported being perpetrators of traditional victimisation (physical, verbal and relational) (Perren et al. 2010). Similarly, in Gradinger, Strohmeier, and Spiel's (2009) study involving 761 Austrian adolescents, between 10.5% and 54.7% reported perpetrating some sort of physical or verbal victimisation. In terms of being a victim, Wang et al. (2010) found that the most common form of victimisation among adolescents in US schools was verbal (36.9%) followed by rumour spreading (32.1%), social exclusion (25.8%), physical (13.2%) and finally cyber (10.1 %), with some victims experiencing more than one type of victimisation. However, the data in Wang et al.'s, (2010) study was collected in 2005/2006 and so the prevalence of cyber bullying may have changed as more adolescents have greater access to technology (Thomas, Connor & Scott, 2015). Nevertheless, 'traditional' victimisation (physical, verbal, and relational) remains the most common form of victimisation. In a recent UK study of 110,778 adolescents, 30% reported regular victimisation of any form, 27% experienced only traditional victimisation (physical, verbal, and relational), <1% experienced only cyber bullying and 3% experienced both traditional and cyber victimisation (Przybylski & Bowes, 2017). Such findings highlight the overlap in experiencing different forms of victimisation, and support the notion that it is important to measure multiple forms of victimisation to gain a more complete understanding of the victimisation experience (Olweus & Limber, 2018).

Depending on the definition and method used approximately 10-30% of youths are involved with peer victimisation as a perpetrator, victim, or sometimes both (Cook et al. 2010; Pornari & Wood, 2010; Mitsopoulou & Giovazolias, 2015) demonstrating that being a victim of and perpetrating peer victimisation is a prevalent experience in adolescence. It is difficult to compare the prevalence rates between studies as different scales were used (behaviour-based vs. definition-based items) and time frames were also different (e.g. within the last six months, or since the beginning of term). Researchers employing a definition-based approach provide participants with an explanation of victimisation/bullying before asking participants whether they have experienced behaviours related to their definition. The explanation typically includes reference to intent, repetition and power imbalance (Volk, Veenstra & Espelage, 2017). Use of the behavioural measures however, involves the use of measures that provide no definition, and instead provide a list of specific behaviours and participants are asked if they have experienced or committed those behaviours (Volk, Veenstra & Espelage, 2017). This approach avoids individual perceptions, bias or stigma associated with the term 'bullying' (Bosworth, Espelage & Simon, 1999; Felix et al. 2011; Thomas, Connor & Scott, 2015). The behaviour-based method also does not assess imbalance of power, or intention which makes it more a suitable approach to capture peer victimisation, as defined within this study.

In previous literature, there was a focus on the comparison of victimisation behaviours between males and females. Males were typically found to be more aggressive than females. However, many of these studies defined aggression as

physical acts and did not include verbal, cyber, or relational aggression (Espelage, Mebane & Swearer, 2004). As females are more likely to use such indirect forms of peer victimisation, their aggression would have been underrepresented in these studies (Miller & Vaillancourt, 2007; Mitsopoulou & Giovazolias, 2015). When investigating relational victimisation, studies have not found a gender difference (e.g. Crick & Grotpeter, 1996; Prinstein, Boergers & Vernberg, 2001; Knight et al. 2002). Espelage, Mebane and Swearer (2004) have stated that to move forward with prevention and intervention efforts, researchers must move beyond focusing on gender differences and focus on the correlates and contexts that promote or maintain aggression, in whatever form, for both boys and girls. Therefore, as youth appear to be equally aggressive just with different behaviours, gender differences will not be the focus of the study and the present study will focus on the cohort as a whole.

Peer victimisation has also been shown to reach its peak prevalence in early- to mid-adolescence (Evans et al. 2016). Drawing upon dominance theory, an increase in peer victimisation may be due to the transition to secondary school where perpetration is thought to be a deliberate tactic to gain dominance in new peer groups (Espelage, Mebane & Swearer, 2004). Another relevant theoretical perspective is that perpetration is driven by status goals and so, victimisation would be more likely to occur when peer status is considered important (Salmivalli, 2010). Peers have a considerable impact on other young people's development during adolescence when the prominence of peer status increases (Bass et al. 2018). Alternatively, attraction theory posits that as adolescents attempt to find

separation from their parents, they become attracted to peers that reflect

independence (e.g. delinquency, aggression) and are less attracted to those with

characteristics similar to childhood (e.g. compliance, obedience) (Espelage, Mebane

& Swearer, 2004). Therefore, adolescents may engage in perpetration behaviours

to attract the attention of their peers. Based on these theoretical explanations, the

current study will focus on experiences of both early and mid-adolescents (11-16

years).

1.4 Peer Victimisation in Sport

Victimisation amongst peers occurring in school has received the majority of

research attention; however, almost half of victimisation events happen outside of

the school environment and these events have been found to leave victims more

afraid (Turner et al. 2015). Although victimisation is rarely considered within the

sporting literature, it is still a concern (Evans et al. 2016). As sport encourages a

competitive attitude, it is possible that peer aggression is seen within the norms of

sport and is considered more socially acceptable (Evans et al. 2016). In sport,

reports of being a victim of at least one instance of victimisation ranges from 44.2%

to 75% (Stafford, Alexander & Fry, 2015; Vertommen et al. 2017). However, the

perpetrator of these incidents is not always peers; the coach or another adult is

reported as the perpetrator in some cases.

The exact rate of prevalence of being victimised by peers, or others, in sport

is unclear. In their study of 609 elite youth Canadian soccer players, Parent and

Fortier (2017) identified that 58.5% had experienced physical violence and 55.7%

experienced psychological victimisation in at least one instance by peers during a

match within the last year. A representative sample of 4043 Dutch and Belgian

adults, were asked to recall their experiences of sport while they were under the

age of 18. Thirty-eight percent of these athletes reported being a victim of

psychological aggression and 11% reported being a victim of physical aggression

(Vertommen et al. 2017). They found that the most common perpetrators of these

acts were their peers.

Across a range of competitions levels, it was found that 24% of athletes (n =

1433) experienced at least one form of physical harm in their main sport or second

sport and that 62% (n = 687) of these instances were instigated by teammates or

peers (Stafford, Alexander & Fry, 2013). Using the same sample of athletes (N =

6124), 75% of participants (n = 4554) reported at least one instance of emotionally

harmful behaviour and the perpetrators of approximately 80% of these occurrences

were peers or teammates (Stafford, Alexander & Fry, 2015). Evans et al. (2016)

found that peer aggression is more prevalent within team sports than individual

sports. A possible explanation for this result was that 28% of the sample constituted

ice hockey players where aggressive acts are expected of them and sport specific

norms could make it more acceptable to admit to certain behaviours (Evans et al.

2016). Although the exact rate of prevalence is unclear, these studies indicate that

victimisation occurs in sport throughout all competition levels, and that the

perpetrators of these acts are often peers.

Extant research suggests several intrapersonal and social correlates of being

a victim or perpetrator. One intrapersonal reason pertains to having high athlete

status. In terms of perpetration, high athlete status may put youth in a powerful

position during school time. This may result in student-athletes perpetrating acts of aggression as competitive sport participants are motivated to commit actions outside the limits of normal competition to gain a sought-after scholarship or place on the team (Volk, Dane & Marini, 2014). Alternatively, high athletic status may also put individuals at risk for being victimised (Evans et al. 2016). For example, O'Neill, Calder and Allen, (2014) found that athletic ability put some young people at risk for victimisation when they had both successful sporting performances and when they made mistakes. The suggested reason for the victimisation was jealousy and that peers wanted to ensure these high achievers were 'cut down to size' (O'Neill, Calder & Allen, 2014).

Further research has been dedicated to the possible effects of sports on aggressive and anti-social behaviour in youth (Endressen & Olweus, 2005; Vertommen et al. 2017). An association between participation in competitive sports and higher levels of peer aggression and victimisation has been found (Volk, Dane & Marini, 2014). Volk and Lagzdins, (2009) also reported that a focus on competition was associated with increased antisocial behaviours and lower morals. Martin, Gould and Ewing (2017) investigated reasons for rule breaking within youth sport. They found that the most common reason for breaking rules was the desire to win. Other common reasons included not wanting to let significant others down, coaches/parents encouraging 'win at all costs' behaviours and avoiding losing friends or popularity. Participation in youth sports with medium or high contact has also consistently been associated with lower levels of morality, a greater tendency to be aggressive, and judgements that aggressive acts in sport are legitimate (Sagar,

Boardley & Kavussanu, 2011). It has been suggested that athletes are taught that

aggression is an acceptable tool for conflict resolution and that athletes

participating in contact sports believe that aggression is an important factor in their

sport (Volk & Lagzdins, 2009). Adolescent males in 'power' sports have a tendency

to act more aggressively both inside and outside of the sporting context (Endressen

& Olweus, 2005). General aggression has repeatedly been associated with elevated

levels of perpetration and victimisation (Volk & Lagzdins, 2009). Overall, these

findings suggest that participation in sport may be associated with undesirable

behaviours including increased anti-social and peer victimisation behaviours.

However, important personal factors that might help explain these behaviours, like

perfectionism, have yet to be considered.

1.5 Perfectionism and Peer Victimisation

The association between perfectionism and peer victimisation is largely

unknown. It has only been examined on two occasions, in samples outside of sport

(Miller & Vaillancourt, 2007; Wilson et al. 2015). Miller and Vaillancourt (2007)

aimed to test the Social Reaction Model, which states that perfectionism develops

as a result of a harsh environment (Flett et al. 2002). They hypothesised that

indirect victimisation (e.g. manipulation of friendships, rumour spreading) would

predict perfectionism. The reason being, perfectionism would develop to help

minimise, or escape from, and cope with the victimisation behaviours. In a sample

of female undergraduates, results showed a positive relationship between recalled

peer victimisation (experienced between the age of eight and 17) and current levels

of perfectionism (Miller & Vaillancourt, 2007). Specifically, indirect victimisation

was a positive predictor of self-oriented perfectionism and socially prescribed perfectionism.

Wilson et al. (2015) aimed to build upon Miller and Vaillancourt's (2007) study by including both male and female adults (18-65 years) and gaining their retrospective accounts of childhood peer victimisation and current perfectionism. They similarly found indirect victimisation to have positive associations with self-oriented perfectionism and socially prescribed perfectionism. These findings thus supported the Social Reaction Model and showed that victimised children believe that by being perfect, others are less likely to dislike them and victimise them in the future (Wilson et al. 2015). Further, the findings indicated that the development of perfectionism was not limited to influences from family life but also included peer interactions in early life experiences. Overall, both Wilson et al. (2015) and Miller and Vaillancourt, (2007) highlight a relationship between peer victimisation and perfectionism. However, it is also possible that perfectionism may precede peer victimisation, in that perfectionism may increase the likelihood of being perpetrators or increasing one's vulnerability to peer victimisation (Miller & Vaillancourt, 2007).

There are theoretical and empirical reasons to suspect that, while recalled peer victimisation predicts future perfectionism, perfectionism may precede peer victimisation. Dependent on the dimension of perfectionism, some young people would more likely engage in victimising their peers and others would more likely perceive being a victim. Self-oriented perfectionism is an intrapersonal trait that has associations with characteristics such as hyper competitiveness (Sherry,

Mackinnon & Gautreau, 2016). This hyper competitiveness could mean that those with self-oriented perfectionism would be more likely to focus on personal achievement over interpersonal relations (Stoeber et al. 2017). In sport, such striving for a win at all costs may generate negative social relations with opponents and team-mates, such as being a perpetrator of victimisation to gain a competitive edge (Ommundsen et al. 2005). It has also been reported that self-oriented perfectionism is positively related with angry hostility and negatively related to Agreeableness (Habke & Flynn, 2002). Anger has been found to be a significant predictor of perpetration behaviours (Bosworth, Espelage & Simon, 1999). Further, Flett, Hewitt and Sherry, (2016) found self-oriented perfectionism to be associated with narcissism, Machiavellianism, intense anger, and a tendency to bear grudges and retaliate for perceived wrongs. These behaviours, their expressions of frustrations, and the methods used to reach their lofty goals are likely to have an adverse impact on interpersonal relationships (Habke & Flynn, 2002). Therefore, due to the evidence demonstrating relationships between self-oriented perfectionism, and anger and hostility, those high in self-oriented perfectionism are likely to be perpetrators of peer victimisation.

It is also possible that self-oriented perfectionism may be unrelated to peer victimisation. Stoeber (2015) found that self-oriented perfectionism was the only dimension of perfectionism that involves prosocial behaviours. The study showed that those high in self-oriented perfectionism take an interest in others and have a negative association with callous and uncaring traits. Regarding humour styles, self-oriented perfectionism has shown a positive relationship with affiliative humour

and a negative relationship with aggressive humour (Stoeber, 2015). Therefore, as self-oriented perfectionism is positively related to prosocial traits and negatively related to aggressive behaviours, it may be unrelated to both perpetration and being a victim.

Socially prescribed perfectionism involves characteristics that mean it is likely to be associated with perpetration. Stoeber et al. (2017) reported that socially prescribed perfectionism was positively correlated with distrust, aggression, hostility, spitefulness, and aggressive feelings when provoked or frustrated. It has also been stated that socially prescribed perfectionism has a positive relationship with five of the seven traits that indicate antisocial personality disorder (Stoeber, 2015). Martin, Gould and Ewing (2017) found that as children develop, the pressure from coaches to succeed becomes stronger. This pressure may promote resentment and anger (Flett, Hewitt & Sherry, 2016) and may encourage rule-breaking (Martin, Gould & Ewing, 2017). When in a competitive context, those with high levels of socially prescribed perfectionism may have a reduced quality of friendships, less peer acceptance and more conflict with peers because of angry reactions and overly negative behaviours (Ommundsen et al. 2005). Socially prescribed perfectionism has also been found to be related to anger-out and negatively related with anger-suppression. In other words, those high in socially prescribed perfectionism may have difficulty experiencing and expressing their anger, and therefore experience interpersonal difficulties (Hewitt et al. 2002). Vicent et al. (2017) found that children aged eight to eleven with high self-oriented perfectionism combined with high socially prescribed perfectionism tended to be

more aggressive, hostile and experience higher levels of anger. Anger and anger

rumination were found to be predictive of direct and indirect aggression in a study

involving children and adolescents aged seven to 13 (Smith et al. 2016). Therefore,

the combination of traits, angry reactions, and negative behaviours may lead those

with high levels of socially prescribed perfectionism to perpetrate peer

victimisation.

The literature also highlights correlates of socially prescribed perfectionism

that suggest it may be associated with being a victim. Habke and Flynn (2002)

describe those with high levels of socially prescribed perfectionism as submissive

and non-assertive, likely to avoid social contact and conflict, and desperately

seeking the approval of others. These behaviours may mean that those with high

levels of socially prescribed perfectionism could be more at risk of being victims of

peer victimisation. High socially prescribed perfectionism has also been associated

with greater loneliness (Hewitt, Flett & Mikail, 2017). Loneliness has been found to

be related to peer victimisation (Catterson & Hunter, 2010; Perren et al. 2010;

Shetgiri, 2013; Zych et al. 2017). In their longitudinal study, Acquah et al. (2016)

demonstrated that social anxiety, social loneliness and emotional loneliness were

all significant predictors of victimisation in students aged 12-16. Such factors

represent challenges in social relationships and social skills, a lack of intimate

attachment and a strong fear that one could be negatively evaluated by others in

social contexts (Acquah et al. (2016). Therefore, as evidence demonstrates that

socially prescribed perfectionism is related to loneliness, and loneliness is related to

victimisation, it is possible that socially prescribed perfectionism is related to being victimised.

Other-oriented perfectionism may be the most important dimension in relation to interpersonal, and peer victimisation behaviours. First, it plays an important role in dyadic perfectionism in the form of partner-oriented perfectionism and team-oriented perfectionism. That is other-oriented perfectionism has been shown to be related to marital distress, however it is the partner that suffers in the relationship not the one with other-oriented perfectionism (Habke & Flynn, 2002; Sherry, Mackinnon & Gautreau, 2016). These findings suggest that it may play a role in peer victimisation (Stoeber, 2016). Other-oriented perfectionism has been shown to be related to a number of negative traits that suggest it is likely to be related to perpetration amongst peers. It has been positively related to the dark triad of personality traits, in particular it has been related to narcissism (Habke & Flynn, 2002; Stoeber, 2014; Stoeber, 2015) and Machiavellianism (Stoeber et al. 2017). It has also been shown to have a negative relationship with Agreeableness (Habke & Flynn, 2002), Honesty-Humility, prosocial goals and interest in others (Stoeber et al. 2017). Honesty-Humility has been found to be a negative predictor of perpetration (Book, Volk & Hosker, 2012). In other words, high other-oriented perfectionism is associated with a lower level of Honesty-Humility, which in turn relates to being a perpetrator of peer victimisation. Stoeber, (2014) found a positive relationship between other-oriented perfectionism and aggressiveness, hostility, passive aggressiveness and a desire for control. In a more recent study, Stoeber (2015) reported positive correlations with physical and

verbal aggression, callousness, aggressive humour, spitefulness and anger. Other-oriented perfectionism has been described as a form of perfectionism that is categorised by a high regard for the self, combined with a low regard for others (Stoeber, 2015). The relationships with more callous, anti-social traits suggest that those high in other-oriented perfectionism are likely to be perpetrators of peer victimisation but unlikely to be victimised.

1.6 The Current Study

Peer victimisation has been shown to be related to perfectionism (Miller & Vaillancourt, 2007). However, this relationship was demonstrated with recalled peer victimisation from an adult population and considered perfectionism as an outcome of victimisation. As different dimensions of perfectionism have been shown to be related to different predictors of victimisation and perpetration, there is the possibility that perfectionism may precede these two aspects of peer victimisation. Therefore, the aim of the study is to examine the relationships between perfectionism and peer victimisation and perpetration and whether dimensions of perfectionism are predictors of peer victimisation and perpetration. As almost half peer victimisation events occur outside of the school environment (Turner et al. 2015) and sport may encourage aggressive behaviours (Evans et al. 2016), the current study will assess the relationship between perfectionism and peer victimisation in youth sport. This study uses both a domain-specific measure and a performance specific measure to assess the relationships between perfectionism and peer victimisation and perpetration in youth sport. The reason for this is perfectionism has been shown to manifest only in certain areas of

people's lives (Dunn, Gotwals & Causgrove Dunn, 2005) and more specific measures have been shown to have greater predictive ability (Dunn et al. 2011). Based on the preceding evidence regarding perfectionism and interpersonal relationships, the hypotheses are:

1. Self-oriented perfectionism will be a positive predictor of perpetration behaviours but not victimisation behaviours.

2. Socially prescribed perfectionism will be a positive predictor of perpetration behaviours and victimisation behaviours.

3. Other-oriented perfectionism will be a positive predictor of perpetration behaviours but not victimisation behaviours.

2. Methods

2.1 Participants

Participants were 150 adolescents (74 males, 70 females, and six preferred not to say) (M = 13.79 years, SD = 1.40, range = 11-16 years) from various team and individual sports clubs in the North of England. The majority of participants played a team sport (n = 99) while 49 participants competed in individual sports and two did not specify. The levels of competition that participants competed at were international (n = 2), national (n = 27), regional (n = 21), county (n = 23), club (n = 48), school (n = 3) and unspecified (n = 26). The mean amount of hours training and competing in their main sport per week was 5.43 hours (SD = 3.63). The mean amount of years the participants had participated in their main sport was 3.84 years (SD = 2.21). In relation to other activities that the participants engage in, their main sport had a mean importance level of 7.43 ± 1.60 (Likert scale 1-9, 1 = *extremely unimportant*, 9 = *extremely important*).

2.2 Procedure

Prior to conducting this non-experimental and cross-sectional study, ethical approval was granted by the York St John University Cross School Research Ethics Committee (Health Science, Sport, Psychological and Social Sciences, and Business) (Appendix 1). Participants were recruited via gate keepers of sports clubs that have youth members (aged 11-16 years). Gatekeepers were initially contacted via email, or a phone call that outlined the study, and requested their permission to gain access to their club. Eighty-eight clubs were contacted and ten clubs agreed to participate in the study (11% response rate). If the clubs agreed to be involved with

the study, a cover letter, an information sheet (Appendix 2) and consent forms (Appendix 3) were sent to parents/guardians prior to data collection. The consent forms were passive unless the club requested active parental consent.

Data collection was organised with each club at their training venue and completed before, during or after a training session. Providing the parents/guardians had given their consent, participants were given an information sheet (Appendix 4) as well as a verbal explanation of the study and asked to provide written assent (Appendix 5) prior to participating in the study. Participants were given the opportunity to ask any questions they had regarding the study. On gaining assent, participants were given a questionnaire regarding perfectionism and experiences of peer victimisation in youth sports (Appendix 6). The questionnaires were completed with the researcher present and took approximately 20 minutes to complete. On completion of the questionnaire participants were provided with a debrief form informing them of useful contacts should they feel affected by any of the issues raised within the questionnaire (Appendix 7). Participants were also given a thank you gift of a water bottle.

2.3 Measures

The questionnaire administered to participants was comprised of five sections. The first section included demographic questions (e.g. age, sex). The next two sections comprised scales of multidimensional perfectionism (Performance Perfectionism Scale for Sport, Brief Hewitt and Flett Multidimensional Perfectionism Scale, and Other-Oriented Perfectionism (1990) Scale). The final two

sections asked participants about their experiences with peer victimisation

(Personal Experiences Checklist, and Personal Experiences Checklist - Reversed).

2.3.1 Multidimensional perfectionism.

2.3.1.1 Brief Hewitt and Flett Multidimensional Perfectionism Scale.

The shortened form of the Hewitt and Flett Multidimensional Perfectionism

Scale (Brief HF-MPS) (Hewitt et al. 2008) was adapted to sport to assess domain-

specific perfectionism. The 15-item scale includes three subscales: self-oriented

perfectionism (e.g. 'One of my goals is to be perfect in everything I do') socially

prescribed perfectionism (e.g. 'The better I do, the better I am expected to do') and

other-oriented perfectionism ('Everything that others do must be of top-notch

quality'). To adapt it for sport, the measure was given a stem sentence ('In my main

sport…') and the instructions adapted to 'Listed below are a number of statements

about how people approach their sport and sport performance. Please read each of

the statements carefully, and circle the number that shows how much you agree or

disagree with each statement. Remember there are no wrong or right answers.'

Answers were given using a 7-point Likert scale (1 = strongly disagree, 7 = strongly

agree). Mean scores are calculated for each subscale. A higher score on each

subscale represents a greater amount of the respective perfectionism dimension.

The Brief Hewitt and Flett Multidimensional Perfectionism scale has been

shown to be a valid and reliable measure of perfectionism (Stoeber, 2016). The

Cronbach's alpha for the subscales have been shown to be within acceptable limits;

α = .88 (self-oriented perfectionism), α = .80 (socially prescribed perfectionism) α =

.84 (other-oriented perfectionism) (Hewitt et al. 2008). This shortened version of

the HF-MPS was employed over the full HF-MPS because, in combination with the other measures, it would be too time-consuming and impractical for the young participants. However, the Brief HF-MPS shows strong correlations with the full version (self-oriented perfectionism r = .91; socially prescribed perfectionism r = .90; other-oriented perfectionism r = .81; Hewitt et al. 2008). The Flesch-Kincaid readability of this scale was 6.8. Hence, the level of reading was suitable for the sample population of 11-16 years old. Due to the age range of the sample population the Child-Adolescent Perfectionism Scales was considered (Flett et al. 2016). However, this scale only measures self-oriented perfectionism and socially prescribed perfectionism and does not assess other-oriented perfectionism and so was not considered appropriate for use.

There are two shortened forms of the HF-MPS that contain self-oriented perfectionism, socially prescribed perfectionism and other-oriented perfectionism. The Brief HF-MPS scale was chosen over the short form published by Cox, Enns and Clara (2002) because all items are positively worded; whereas the Cox, Enns and Clara (2002) measure includes reverse-scored items for other-oriented perfectionism. Items that are negatively worded are useful for reducing response bias. Specifically, because the items are phrased in an opposite direction, participants must read the items carefully to fully understand them and make an informed response (Field, 2009). However, in the context of measuring perfectionism, it is unclear if negatively worded (reverse-scored) items capture the intended construct in the same manner as positively worded items (Stoeber, 2016). Consequently, the Cox, Enns and Clara (2002) scale may not capture other-oriented

perfectionism in the intended way. When comparing the two short forms, Stoeber (2016) found that the Cox, Enns and Clara (2002) version was unable to detect many significant correlations that are theoretically important for understanding other-oriented perfectionism. In addition, when researching perfectionism with young people, using positively worded items is often preferable to aid their comprehension (Hill, Appleton & Mallinson, 2016).

2.3.1.2 Other-Oriented Perfectionism (1990) Scale.

The Other-Oriented Perfectionism, 1990 Scale (OOP-90) (Hewitt & Flett, 1990) was used to assess more extreme aspects of domain-specific other-oriented perfectionism than the Brief HF-MPS. The scale consists of 8-items (e.g. '*If I do not set very high standards for people I know, they are likely to end up second-rate people'*). In line with previous research (Stoeber, 2014), the scale was incorporated at the end of the Brief HF-MPS scale and hence used the same instructions and stem sentence. Answers for this scale were also given using a 7-point Likert scale (1 = *strongly disagree*, 7 = *strongly agree*). A higher mean score represents a greater amount of other-oriented perfectionism. Studies have shown that the OOP-90 scale is reliable (α = .83) and valid (Nealis et al. 2015). The Flesch-Kincaid grade level for readability was 8.3 for this scale. Therefore, younger participants may find some terminology more challenging. However, as agreed by the ethics committee, the researcher was present during data collection so participants had the opportunity to ask for anything to be explained.

Extra focus was given to this dimension of perfectionism because peer victimisation is an interaction between peers and other-oriented perfectionism is

an interpersonal dimension of perfectionism relevant to interpersonal behaviours.

In addition, other-oriented perfectionism has not received as much attention in the

literature as the more intrapersonal dimensions of perfectionism; namely, self-

oriented perfectionism and socially prescribed perfectionism (Hill, Appleton &

Mallinson, 2016). In studies where the participants are children or adolescents, an

age appropriate scale such as the Child-Adolescents Perfectionism Scale has often

been used (e.g. Appleton & Hill, 2012). However, as previously noted this scale only

includes subscales for self-oriented perfectionism and socially prescribed

perfectionism. Therefore, the other-oriented perfectionism dimension is rarely

studied in child or adolescent populations (Stoeber, 2014).

2.3.1.3 Performance Perfectionism Scale for Sport.

The Performance Perfectionism Scale for Sport (PPS-S) (Hill, Appleton &

Mallinson, 2016) is a domain and context specific measure based on the Hewitt and

Flett (1991) model of perfectionism and was used to assess sport performance

specific perfectionism. The 12-item scale measures three subscales: self-oriented

performance perfectionism (e.g. '*I am tough on myself when I do not perform*

perfectly'), socially prescribed performance perfectionism (e.g. '*People always*

expect more, no matter how well I perform') and other-oriented performance

perfectionism (e.g. '*I have a lower opinion of others when they do not perform*

perfectly'). Participants were given the instruction: 'Below are statements that

reflect beliefs that athletes hold when taking part in sport. Some beliefs refer to

other people. For these, think about the people involved in your sport participation

whose opinion you value. Please read each of the statements carefully, and circle

the number that shows how much you agree or disagree with each statement.

Remember there are no wrong or right answers.' A stem sentence of 'In my main

sport…' was used to so participants could contextualise their answers. Answers

were given on a 7-point Likert scale (1 = *strongly disagree*, 7 = *strongly agree*).

Mean scores are calculated for each subscale. A higher score on each subscale

represents a greater amount of the respective perfectionism dimension. The PPS-S

is a valid and reliable measure and can be used with adolescents (Hill, Appleton &

Mallinson, 2016). Cronbach's alpha's indicate acceptable internal reliability (self-

oriented performance perfectionism α = .70, socially prescribed performance

perfectionism α = .73 and other-oriented performance perfectionism α = .79) (Hill,

Appleton & Mallinson, 2016).

2.3.2 Peer victimisation.

2.3.2.1 Personal Experiences Checklist.

The Personal Experiences Checklist (PECK) (Hunt, Peters and Rapee, 2012)

was used to assess experiences of peer victimisation. The 32-item scale measures

four subscales of victimisation: relational/verbal (e.g. '*Other kids ignore me on*

purpose'), cyber (e.g. '*Other kids say nasty things to me on an instant messenger*

(e.g. Snapchat)'), physical (e.g. *'Other kids play nasty practical jokes on me where I*

might get hurt or injured') and cultural (e.g. *'Other kids make fun of my language'*).

To adapt the measure to be domain-specific, participants were asked to think about

their experiences 'whilst participating in their main sport since starting school in

September'. Answers were given on a 5-point Likert scale (0 = *never*, 4 = *every day*).

A mean score for each subscale and an overall mean score was calculated. A higher subscale or overall score represents being the victim of the behaviours more often.

The PECK has been shown to be a valid assessment of the experience of being victimised (Hunt, Peters & Rapee, 2012). The internal consistency, as measured by Cronbach's alpha, for each subscale has been shown to be acceptable (relational/verbal α = .91, physical α = .91, cyber α = .90 and culture α = .78). The scale does not assess the intention of the behaviours or a power differential. Therefore, it is suitable for the chosen definition of peer victimisation in this study. The PECK has a Flesch-Kincaid readability of 2.8 and is a suitable for those aged eight and above (Hunt, Peters & Rapee, 2012), which the participants in the current study all are.

2.3.2.2 Personal Experiences Checklist – reversed.

The Personal Experiences Checklist was reversed (PECK-reversed) to assess experiences of the perpetration of peer victimisation. The 32-item scale measures four subscales of perpetration: relational/verbal (e.g. '*I ignore other kids on purpose'*) cyber (e.g. '*I say nasty things about other kids on an instant messenger (e.g. Snapchat)'*) physical (e.g. *'I play practical jokes on other kids where they might get hurt of injured'*) and cultural (e.g. '*I make fun of other kids' language'*). Participants were given the instruction *'*Listed below are a number of ways kids can be nasty to each other. Please read each statement carefully and think about how often you have done these things to someone else whilst participating in your main sport since the start of the school year in September.' Answers were given on a 5-point Likert scale (0 = *never,* 4 = *every day*). A mean score for each subscale and an

overall mean score was calculated. A higher subscale or overall score represents being the perpetrator of the behaviours more often. The scale has been found to have an acceptable internal consistency (α =.98) (Stavrinides et al. 2018) and again was suitable for the reading age of the participants.

2.4 Data Analysis

Data analysis was carried out using IBM Statistic SPSS 24. In order to clean the data, a missing value analysis was performed and any participant displaying greater than 5% missing data was removed from further analysis (Tabachnick & Fidell, 2014). Any remaining missing data remaining was replaced via mean substitution (Graham, Cumsille & Elek-Fisk, 2003). The mean value of the non-missing items within the subscale was found for the each individual where the missing data was located. Multivariate outliers were assessed using the Mahalanobis distance and the Cook's distance. The reliability of each subscale was calculated using Cronbach's alpha coefficients. Descriptive statistics were then calculated to check the characteristics of the sample. Bivariate correlations were computed, and the assumption of a linear relationship was checked. The no multicollinearity, homoscedasticity and normal distribution assumptions were also checked. The no multicollinearity assumption was checked via tolerance being greater than .1 and variance inflation factor being less than five (Field, 2009). The homoscedasticity assumption was checked with scatterplots of *ZRESID and *ZPRED. The data was heteroscedastic and therefore violated the assumption that the variance of errors shows homoscedasticity. The normal distribution of residuals assumption was checked via P-Plots and showed a non-normal distribution.

To correct these violations, the data could have been transformed. However, transforming the data means the construct is different to the construct that was originally measured, which can have negative implications for interpreting the data (Field, 2009). If the wrong transformation was to be applied then this could also lead to worse consequences than analysing the untransformed scores. Even if assumptions are violated, conclusions can still be drawn about the sample however, the findings cannot be generalised beyond the current sample (Field, 2009). Gelman and Hill (2007) further suggest that the assumption that the errors are normally distributed for estimating the regression line is barely important and that they do not recommend diagnostics of the normality of regression residuals. There is also no non-parametric alternative for a multiple regression. Therefore, despite the violation of the normal distribution of errors and non homoscedascity, multiple regressions were performed for each instrument of perfectionism against overall victimisation and overall perpetration, and against each subscale for victimisation and perpetration.

3. Results

3.1 Preliminary Analysis

The results of missing value analysis showed that there were 130 complete cases and 20 cases with at least one item non-response. Three cases were removed and excluded from further analysis for having exceeded 5% (≤ 5 items) of missing data (Tabachnick & Fidell, 2014). For the remaining cases with missing data, the number of missing items was less than or equal to two (M = 1.18, SD = 0.38). For the 20 cases with missing data, there were 18 unique patterns with the ratio of patterns to cases being 0.9 (McKnight et al. 2007). The result of Little's (1988) Missing Completely At Random Test demonstrated that the data was missing completely at random (χ^2 =1806.15, df = 1836, p = .686). In order to preserve the number of participants and statistical power, the remaining missing values were replaced with the individual's mean of the relevant subscale (Graham, Cumsille & Elek-Fisk, 2003). After removing cases for missing values, the study was left with 147 participants (72 males, 69 females, and six preferred not to say) (M = 13.76 years, SD = 1.39). The influence of outliers on the results was checked using the Mahalanobis distance of χ^2 (3) = 16.266 and the Cook's distance. Upon examining these distances, the Malahanobis distance did not exceed 16.266 and Cook's distance was less than one indicating that the outliers were not influencing the results and therefore, were not removed (Tabachnick & Fidell, 2007).

3.2 Descriptive Statistics and Reliability

Descriptive statistics and Cronbach's alpha reliability estimates are reported in Table 1. Except for Hewitt and Flett's (1991) other-oriented perfectionism (α =

.69), all other perfectionism subscales showed acceptable levels of internal

consistency (αs ≥.70) (Nunnally, 1978). However, because other-oriented

perfectionism is a short item scale, an alpha level of .6 is acceptable (Loewenthal,

2001). The subscales for cyber victimisation and perpetration (α =.48 and .47

respectively) and cultural victimisation and perpetration (α = .51 and .33

respectively) demonstrated poor internal consistency and so these subscales were

not included in the main analysis. All other scales for victimisation and perpetration

demonstrated acceptable levels of internal consistency (αs ≥.70).

As shown in Table 1. the means and standard deviations indicated that, on

average, in comparison to the midpoint of the scales, youth sport participants

reported moderate levels of both performance and domain-specific self-oriented

perfectionism, and socially prescribed perfectionism. Participants reported low

levels of the three forms of other-oriented perfectionism (performance, domain-

specific, and OOP-90). The mean values for self-oriented perfectionism and socially

prescribed perfectionism are consistent with previous research (Mallinson & Hill,

2011; Stoeber, 2015). However, the mean values for other-oriented perfectionism

are slightly lower than previous research (Mallinson & Hill 2011; Stoeber, 2015). For

all forms of peer victimisation and perpetration, participants reported low levels.

The most prevalent subscale for both victimisation and perpetration was

relational/verbal followed by physical. In comparison to previous research, results

for all forms of victimisation were consistent with findings in Williams et al. (2017).

In terms of perpetration, participants here reported less overall perpetration and

less cyber perpetration than youth in Greek and Cypriot schools (Charalampous et al. 2018; Stavrinides et al. 2018).

Table 1. Descriptive statistics and reliability estimates

		Mean	SD	Likert Scale	Min-Max	α
1.	SOPP	4.73	1.12	1-7	1.5-7.0	.71
2.	SPPP	3.07	1.23	1-7	1.0-6.5	.78
3.	OOPP	2.30	1.12	1-7	1.0-5.5	.78
4.	HFSOP	4.51	1.25	1-7	1.2-7.0	.82
5.	HFSPP	3.45	1.16	1-7	1.0-6.4	.77
6.	HFOOP	2.89	1.00	1-7	1.2-5.8	.69
7.	HFOOP90	2.06	.91	1-7	1.0-5.0	.86
8.	R/V	.46	.48	0-4	0.0-2.5	.85
9.	Cyber	.12	.19	0-4	0.0-1.0	.48†
10.	Phys	.29	.46	0-4	0.0-3.2	.86
11.	Cult	.20	.37	0-4	0.0-2.0	.51†
12.	PR/V	.23	.32	0-4	0.0-1.9	.74
13.	PCyber	.06	.16	0-4	0.0-1.0	.47†
14.	PPhys	.18	.31	0-4	0.0-1.9	.78
15.	PCult	.05	.16	0-4	0.0-1.0	.33†
16.	Victim	.30	.31	0-4	0.0-1.8	.90
17.	Perp	.15	.20	0-4	0.0-1.0	.85

Note. SOPP = self-oriented performance perfectionism; SPPP = socially prescribed performance perfectionism; OOPP = other-oriented performance perfectionism; HFSOP = self-oriented perfectionism; HFSPP = socially prescribed perfectionism; HFOOP = other-oriented perfectionism; HFOOP90 = other-oriented perfectionism (1990 scale); R/V = relational/verbal victimisation; Cyber = cyber victimisation; Phys = physical victimisation; Cult = cultural victimisation; PR/V = relational/verbal perpetration; PCyber = cyber perpetration; PPhys = physical perpetration; PCult = cultural perpetration; Victim = overall victimisation; Perp = overall perpetration. †demonstrated poor internal consistency and not included in the main analysis.

3.3 Bivariate correlations

The Pearson's bivariate correlations are reported in Table 2. The different dimensions of perfectionism had significant, small to large, positive correlations with each other (.1 = small, .3 = moderate, .5 = large; Cohen, 1988). The three dimensions of perfectionism as measured by the Brief Hewitt and Flett Multidimensional Perfectionism Scale did not significantly correlate with any of the

victimisation or perpetration scales. Using the OOP-90 scale, other-oriented perfectionism had significant, small, positive correlations with overall victimisation, physical victimisation, overall perpetration and physical perpetration. Self-oriented performance perfectionism had a significant, small, positive correlation with overall victimisation. Socially prescribed performance perfectionism had significant, small, positive correlations with relational/verbal victimisation, physical victimisation and overall victimisation. Other-oriented performance perfectionism had significant, small, positive correlations with overall perpetration, physical perpetration, and relational/verbal perpetration.

Table 2. Bivariate correlations

		1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.
1.	SOPP	-																
2.	SPPP	.45**	-															
3.	OOPP	.31**	.42**	-														
4.	HFSOP	.60**	.41**	.18*	-													
5.	HFSPP	.51**	.64**	.35**	.58**	-												
6.	HFOOP	.42**	.47**	.52**	.46**	.61**	-											
7.	HFOOP90	.31**	.40**	.68**	.18	.39**	.59**	-										
8.	R/V	.16*	.17*	.10	-.02	.05	.03	.14	-									
9.	Cyber	.07	-.03	-.05	-.01	-.09	-.06	.06	.48**	-								
10.	Phys	.14	.18*	.14	.06	.02	.12	.22**	.69**	.35**	-							
11.	Cult	.10	.05	.10	.07	.06	.10	-.04	.29**	.13	.08	-						
12.	PR/V	.13	.14	.21**	-.06	.03	.13	.15	.54**	.24**	.47**	.19*	-					
13.	PCyber	-.03	.06	.10	-.16	-.04	-.06	.15	.23**	.47**	.25**	.08	.42**	-				
14.	PPhys	.10	.11	.21*	-.07	-.02	.15	.26**	.41**	.33**	.61**	.16	.59**	.47**	-			
15.	PCult	.02	.03	.14	-.04	.08	.08	.18*	.18**	.12	.04	.13	.38**	.24**	.22**	-		
16.	Victim	.17*	.17*	.12	.04	.03	.07	.17*	.94**	.57**	.85**	36**	.55**	.31**	.55**	.15	-	
17.	Perp	.11	.14	.23**	-.09	.01	.13	.24**	.52**	.37**	.56**	.20	.90**	.64**	.85**	.44**	.60**	-

p < .05, **p* < **.**01 (two-tailed)

Note. SOPP = self-oriented performance perfectionism; SPPP = socially prescribed performance perfectionism; OOPP = other-oriented performance perfectionism; HFSOP = self-oriented perfectionism; HFSPP = socially prescribed perfectionism; HFOOP = other-oriented perfectionism; HFOOP90 = other-oriented perfectionism (1990 scale); R/V = relational/verbal victimisation; Cyber = cyber victimisation; Phys = physical victimisation; Cult = cultural victimisation; PR/V = relational/verbal perpetration; PCyber = cyber perpetration; PPhys = physical perpetration; PCult = cultural perpetration; Victim = overall victimisation; Perp = overall perpetration.

3.4 Multiple Regressions

A series of multiple regression analyses were conducted to examine the predictive ability of dimensions of the brief HF-MPS, brief HF-MPS with OOP-90 and performance perfectionism in terms of overall peer victimisation and perpetration and their individual subscales. In checking the assumptions underpinning each regression model, there was no multicollinearity identified for any of the models examined. In each case, the tolerance was greater than .1 and the Variance Inflation Factor value was less than five (Field, 2009). Based on the scatterplots of *ZRESID and *ZPRED, and P-Plots there was some indication of heteroscedasticity and a non-normal distribution of the residuals for each variable.

3.4.1 Brief HF-MPS.

In the first model, as shown in Table 3., self-oriented perfectionism, socially prescribed perfectionism and other-oriented perfectionism did not account for a significant proportion of the variance in overall peer victimisation (R^2 = .01, F (3, 143) = .27, p = .845). For subsequent models, self-oriented perfectionism, socially prescribed perfectionism and other-oriented perfectionism did not account for a significant proportion of the variance in relational/verbal victimisation (R^2 = .002, F (3, 143) = .10, p = .962) or physical victimisation (R^2 = .02, F (3, 143) = 1.00, p = .395).

The brief HF-MPS did not account for a significant proportion of the variance in overall perpetration (R^2 = .05, F (3, 143) = 2.36, p = .074). For subsequent models, self-oriented perfectionism, socially prescribed perfectionism and other-oriented perfectionism did not account for a significant proportion of the variance in

relational/verbal perpetration (R^2 = .04, F (3, 143) = 1.75, p = .160) or physical

perpetration (R^2 = .05, F (3, 143) = 2.65, p = .051).

Table 3. Brief HF-MPS regression models for each criterion variable

	B	ß	t
Outcome: Overall victimisation			
SOP	.01	.02	.20
SPP	-.01	-.04	-.32
OOP	.03	.08	.78
Outcome: R/V victimisation			
SOP	-.002	-.01	.95
SPP	.02	.05	.42
OOP	.00	.00	.00
Outcome: Physical victimisation			
SOP	.02	.05	.45
SPP	-.04	-.11	-.96
OOP	.08	.17	1.56
Outcome: Overall perpetration			
SOP	-.03	-.19	-1.88
SPP	-.004	-.02	-.19
OOP	.05	.23	2.24
Outcome: R/V perpetration			
SOP	-.04	-.15	-1.46
SPP	-.002	-.01	-.07
OOP	.07	.20	1.95
Outcome: Physical perpetration			
SOP	-.03	-.13	-1.30
SPP	-.03	-.11	-.97
OOP	.09	.28	2.68

Note. SOP = self-oriented perfectionism, SPP = socially prescribed perfectionism, and OOP = other oriented perfectionism, R/V victimisation = relational/verbal victimisation, R/V perpetration = relational/verbal perpetration.

3.4.2 Brief HF-MPS with OOP-90.

Table 4. shows the model for the brief HF-MPS with OOP-90 as predictors of

victimisation and perpetration. The brief HF-MPS with OOP-90 did not account for a

significant proportion of the variance in overall peer victimisation (R^2 = .03, F (3,

143) = 1.54, p = .208). For the next model, self-oriented perfectionism, socially

prescribed perfectionism and OOP-90 did not account for a significant proportion of the variance for relational/verbal victimisation (R^2 = .02, F (3, 143) = .90, p = .445). A combination of self-oriented perfectionism, socially prescribed perfectionism and OOP-90 was found to have a significant linear relationship with physical victimisation (F (3, 143) = 3.02, p = .032); accounting for 6% of the variance. Only OOP-90 was a significant positive predictor of physical victimisation (B = .13, ß = .26, t =2.91, p = .004).

A combination of self-oriented perfectionism, socially prescribed perfectionism and OOP-90 was found to have a significant linear relationship with overall perpetration (F (3, 143) = 3.93, p = .010). The model accounted for 8% of the variance. Only OOP-90 was a significant positive predictor of overall perpetration (B = .06, ß = .27, t = 3.08, p = .002). For the next model, self-oriented perfectionism, socially prescribed perfectionism, and OOP-90, did not account for a significant proportion of the variance in relational/verbal perpetration (R^2 = .03, F (3, 143) = 1.57, p = .199). A combination of self-oriented perfectionism, socially prescribed perfectionism and OOP-90 was found to have a significant linear relationship with physical perpetration (F (3, 143) = 4.54, p = .005). The model accounted for 9% of the variance. Only OOP-90 was a significant positive predictor (B = .11, ß = .31, t = 3.58, p = .000).

Table 4. Brief HF-MPS with OOP-90 regression models for each criterion variable

	B	ß	t
Outcome: Overall victimisation			
SOP	.01	.05	.48
SPP	-.02	-.08	-.69
OOP90	.06	.19	2.10
Outcome: R/V victimisation			
SOP	.002	.004	.04
SPP	-.01	-.01	-.11
OOP90	.07	.14	1.55
Outcome: Physical victimisation			
SOP	.03	.09	.93
SPP	-.05	-.14	-1.28
OOP90	.13	.26	2.91*
Outcome: Overall perpetration			
SOP	-.02	-.13	-1.31
SPP	-.003	-.02	-.19
OOP90	.06	.27	3.08*
Outcome: R/V perpetration			
SOP	-.03	-.10	-.1.02
SPP	.01	.03	.25
OOP90	.06	.16	1.81
Outcome: Physical perpetration			
SOP	-.02	-.06	-.63
SPP	-.03	-.10	-.97
OOP90	.11	.31	3.58*

*$p < .05$

Note. SOP = self-oriented perfectionism, SPP = socially prescribed perfectionism, and OOP90 = other oriented perfectionism (1990 Scale) R/V victimisation = relational/verbal victimisation, R/V perpetration = relational/verbal perpetration.

3.4.3 Performance perfectionism.

Table 5. shows the model for the performance perfectionism as predictors of victimisation and perpetration. Performance perfectionism did not account for a significant proportion of the variance in overall peer victimisation ($R^2 = .04$, $F (3, 143) = 2.01$, $p = .116$). For subsequent models, performance perfectionism did not account for a significant proportion of the variance in relational/verbal victimisation

(R^2 =.04, F (3, 143) = 1.86, p = .138) or physical victimisation (R^2 = .04, F (3, 143) = 1.96, p = .122).

A combination of self-oriented performance perfectionism, socially prescribed performance perfectionism and other-oriented performance perfectionism was found to have a significant linear relationship with overall perpetration (F (3, 143) = 2.88, p = .038). The model accounted for 6% of the variance in overall perpetration. Only other-oriented performance perfectionism was a significant, positive predictor of overall perpetration (B = .04 ß = .21, t = 2.30, p = .023). For subsequent models, performance perfectionism did not account for a significant proportion of the variance in relational/verbal perpetration (R^2 = .05, F (3, 143) = 2.59, p = .055) or physical perpetration (R^2 = .05, F (3, 143) = 2.24, p = .086).

Table 5. Performance perfectionism regression models for each criterion variable

	B	ß	t
Outcome: Overall victimisation			
SOPP	.03	.11	1.22
SPPP	.03	.10	1.01
OOPP	.01	.04	.44
Outcome: R/V victimisation			
SOPP	.05	.11	1.15
SPPP	.04	.11	1.13
OOPP	.01	.02	.21
Outcome: Physical victimisation			
SOPP	.03	.06	.68
SPPP	.05	.13	1.27
OOPP	.03	.06	.69
Outcome: Overall perpetration			
SOPP	.004	.02	.26
SPPP	.01	.04	.43
OOPP	.04	.21	2.30*
Outcome: R/V perpetration			
SOPP	.02	.06	.65
SPPP	.01	.04	.45
OOPP	.05	.18	1.94
Outcome: Physical perpetration			
SOPP	.01	.03	.30
SPPP	.01	.02	.22
OOPP	.05	.19	2.09

*$p < .05$

Note. SOPP = self-oriented performance perfectionism, SPPP = socially prescribed performance perfectionism, and OOPP = other oriented performance perfectionism, R/V victimisation = relational/verbal victimisation, R/V perpetration = relational/verbal perpetration.

4. Discussion

This study examined the relationships between perfectionism and peer victimisation and perpetration, and whether dimensions of perfectionism are predictive of peer victimisation and perpetration in youth sport. In so doing, this study was the first to provide insights into the associations between domain and performance specific perfectionism and aggressive peer behaviours in youth sport participants. The findings of this study are that other-oriented performance perfectionism was a significant positive predictor of the overall perpetration of peer victimisation and other-oriented perfectionism, as measured by the OOP-90 scale, was also a significant positive predictor of the overall perpetration of peer victimisation, and the perpetration and being victim of physical peer victimisation.

4.1 Self-Oriented Perfectionism and Peer Victimisation

It was hypothesised that self-oriented perfectionism would be a positive predictor of perpetration behaviours but not victimisation behaviours. This hypothesis was partially supported because self-oriented perfectionism and self-oriented performance perfectionism were not significantly related to victimisation behaviours. However, in contrast to expectations, they were not significantly related to perpetration behaviours either. In terms of victimisation, the findings of this study differ from previous research. Miller and Vaillancourt (2007) found that indirect victimisation was a significant predictor of self-oriented perfectionism. As the current study used the Personal Experiences Checklist, indirect (or relational) aggression was not isolated but was combined with verbal aggression. Miller and Vaillancourt (2007) found a non-significant relationship between verbal aggression

and self-oriented perfectionism. Therefore, by categorising verbal and relational

aggression as one form of victimisation, it is possible that any potential nuanced

difference between them was not detected in this study. Equally, because Miller

and Vaillancourt's (2007) study was testing the opposite relationship to the current

study, it is possible that victimisation may be an antecedent to perfectionism and

not an outcome; however, a longitudinal study is required to determine a causal

relationship (Miller & Vaillancourt, 2007). In addition, the sample in Miller and

Vaillancourt's (2007) study were asked to recollect experiences from age eight to

17. The current sample was asked to recall experiences from recent months and

therefore, would not capture historic victimisation and perpetration. The current

sample was also limited to experiences in sport whereas Miller and Vaillancourt's

(2007) sample could recall experiences from any environment. Sport may be a

protective environment, because teams share the same interests, values and goals,

and therefore victimisation behaviours may be less likely to emerge for individuals

high in self-oriented perfectionism (Volk, & Lagzdins, 2009; Evans et al. 2016).

A potential reason for self-oriented perfectionism not being associated with

perpetration is that it entails positive social traits. Stoeber, (2015) found that self-

oriented perfectionism was the only dimension of multidimensional perfectionism

to demonstrate prosocial connotations. Not only did self-oriented perfectionism

show more positive social traits than other dimensions of perfectionism, self-

oriented perfectionism also showed a greater association with prosocial traits than

those without perfectionism (Stoeber, 2015). Hence, these relationships with more

positive, prosocial traits seem to suggest that those high in self-oriented

perfectionism are unlikely to engage in antisocial behaviour. Like previous studies, those high in self-oriented perfectionism may value peers as allies in the pursuit of their lofty goals and be able to form quality relationship with them; rather than engaging in hypercompetitive behaviours that may block goal pursuit (Mallinson et al. 2014).

4.2 Socially Prescribed Perfectionism and Peer Victimisation

It was hypothesised that socially prescribed perfectionism would be a positive predictor of both victimisation and perpetration behaviours. This hypothesis was not supported because the findings demonstrated that socially prescribed perfectionism was not a significant predictor of overall victimisation, overall perpetration or any of the individual victimisation and perpetration subscales. These findings are both consistent and inconsistent with previous research as Wilson et al. (2015) also found non-significant relationships between physical victimisation, and socially prescribed perfectionism. However, Wilson et al. (2015) did find a significant relationship between indirect peer victimisation and socially prescribed perfectionism. As alluded to previously, this could be due to Wilson et al. (2015) testing the opposite relationship to this study or the manner in which indirect victimisation was constituted in their study.

Theoretically, the non-significant findings here were unexpected because socially prescribed perfectionism has been found to be related to characteristics typical of both perpetrators and victims. For example, having less peer acceptance and more conflict with peers in youth sports (Ommundsen et al. 2005). Those with high levels of socially prescribed perfectionism have also been found to be

aggressive (Stoeber et al. 2017; Vicent et al. 2017). However, the measure of aggression used in previous studies does not state that the aggression is directed specifically at peers. Perhaps it is not peers that place expectations on those with socially prescribed perfectionism, and they direct their aggression at those they perceive to provide the unrealistic expectations for them, for example, coaches or parents. Alternatively, those high in socially prescribed perfectionism may only be aggressive when they perceive they are failing to meet their goals and therefore, are not aggressive when winning matches or outperforming peers. These factors were not considered here. Further research is required to determine when and how those high in socially prescribed perfectionism behave aggressively towards others.

Due to those high in socially prescribed perfectionism desperately seeking the approval of others, it was hypothesised that others may take advantage of them trying to avoid other peoples' rejection and they could be victimised by peers (Habke & Flynn, 2002). The findings of this study did not support the hypothesis. Habke and Flynn (2002) described those with socially prescribed perfectionism as likely to avoid social contact and conflict. Therefore, it is possible that those with socially prescribed perfectionism learn to avoid those that are perpetrators and so avoid being a victim of peer victimisation. Another explanation could be that those with socially prescribed perfectionism do not perceive peers to be placing high expectations on them but feel the pressure from others such as, coaches or parents. Therefore, the interpersonal difficulties occur with 'others' but not with peers. In this regard, multiple studies have demonstrated positive relationships between perceived coach pressure, an ego-involving coach climate, perceived

parental pressure and maladaptive personal and social outcomes for perfectionistic youth sport participants (e.g. Ommundsen et al. 2005; Lemyre, Hall & Roberts, 2008; Hill, Mallinson-Howard & Jowett, 2018).

4.3 Other-Oriented Perfectionism and Peer Victimisation

The final hypothesis stated that other-oriented perfectionism would be a positive predictor of perpetration behaviours but not victimisation. This hypothesis was partially supported as other-oriented perfectionism was a positive predictor of perpetration behaviours. Contrary to expectations, other-oriented perfectionism was also a positive predictor of physical victimisation. Although this was only the case when other-oriented perfectionism was measured using the OOP-90 scale.

Consistent with the current study's findings, Stoeber (2014; 2015) found positive correlations between other-oriented perfectionism, general aggressiveness and physical aggression. Other-oriented performance perfectionism and OOP-90 were significant positive predictors of overall perpetration and physical perpetration here. The HF-MPS other-oriented perfectionism, however, was not a significant predictor of these outcomes or of any of the other perpetration, or victimisation, variables. These findings provide further support for domain-specific measures having greater predictive ability than general measures (Dunn et al. 2011). Thus, future studies should consider employing a more specific measure, made especially for sport (e.g. PPS-S) when trying to understand how perfectionism manifests in certain areas of people's lives, (Dunn, Gotwals & Causgrove Dunn, 2005).

The standardised betas also showed that other-oriented perfectionism measured by the OOP-90 scale was a stronger predictor of overall perpetration than other-oriented performance perfectionism. OOP-90 has been described as a nastier and colder form of other-oriented perfectionism and captures a more extreme version of other-oriented perfectionism than the HF-MPS (Stoeber, 2014, Stoeber, 2015). For example, the OOP-90 has shown a positive correlation with social dominance goals, but this has not been the case when other-oriented perfectionism is measured with the HF-MPS subscale (Stoeber, 2014). Therefore, the OOP-90 scale is more likely to capture behaviours of perpetrators than general other-oriented perfectionism or other-oriented perfectionism adapted to sport. However, as a domain-specific measure tends to have greater predictive ability than general measures, an OOP-90 measure developed specifically for sport may show an even stronger relationship (Dunn et al. 2011). This is a potential avenue for future research.

An unexpected finding was that when measured with OOP-90, other-oriented perfectionism was a positive predictor of physical victimisation. In schools, the forms of victimisation more commonly used are verbal and relational as these methods are more likely to go undetected by teachers (Wang et al. 2010). In sport, physical contact and aggression towards opponents is often considered acceptable behaviour (Volk & Lagzdins, 2009; Sagar, Boardley & Kavussanu, 2011). Therefore, physical acts may be regarded as 'part of the sport' and so perpetrators are less likely to be reprimanded for their behaviour and continue to victimise others. In terms of individuals high in OOP-90 experiencing physical victimisation from peers,

they may be targeted in this manner in the sports environment as a form of retaliation for placing unrealistic demands on others (Pornari & Wood, 2010). Overall, the findings support previous research in that other-oriented perfectionism is the most prominent and problematic dimension in relation to interpersonal behaviours (Stoeber, 2016).

4.4 Limitations and Future Research Directions

The findings of this study, whilst important, must be considered in the context of their strengths and limitations. First, the Brief HF-MPS is a valid and reliable measure of global perfectionism that was adapted to be domain-specific. The measure was contextualised instructionally however, this may not have been sufficient enough to provide a valid and reliable measure of domain-specific perfectionism (Stoeber & Madigan, 2016). Participants may have misread the instructions and answered the items as general perfectionism and not perfectionism in sport. Revising the items of the measure could be a better approach to contextualise the measure. However, even after amending the items, because the measure was not developed with a sport context in mind, it is unclear if the measure fully captures perfectionism in sport (Hill, Appleton & Mallinson, 2016). Therefore, future research should consider using domain-specific measures such as the Performance Perfectionism Scale for Sport, or the Sport Multidimensional Perfectionism Scale-2, wherever possible.

The Personal Experience Checklist is a self-report measure. Self-report measures come with advantages in the victimisation literature such as the individual being best placed to report covert victimisation (Volk, Dane & Marini,

2014). However, self-report measures also come with limitations. As peer

victimisation is considered part of anti-social behaviour there can be bias with

socially desirable responses (Volk, Veenstra & Espelage, 2017). Social desirable

responding is when individuals present themselves in a favourable way, and answer

with culturally accepted responses, regardless of their true feelings about a topic

(Podsakoff et al. 2003). Social desirability response bias may, in part, explain the

low amount of victimisation and perpetration behaviours reported in the current

study, because respondents are often unwilling to report accurately on sensitive

topics (Fisher, 1993). Therefore, as participants may not have answered honestly,

particularly with regards to perpetrating aggression, the responses may disguise the

true relationship between variables in this study.

One way of dealing with this is issue, is to measure the predictor and

criterion variables from different sources (Podsakoff et al. 2003). For example, the

measure of perfectionism could be self-reported, but the measure of peer

victimisation and perpetration could be peer- or coach-reported. Youth may be

more comfortable admitting to seeing anti-social behaviours in others rather than

admitting to their own behaviours of being a victim or perpetrator (Martin, Gould &

Ewing, 2017). Another solution could be to assess the participants' tendencies to

present themselves in a more favourable and socially desirable way. One such scale

for assessing social desirability is the Marlowe-Crowne Social Desirability Scale

(Crowne & Marlowe, 1960). A higher score on this scale indicates a stronger

tendency to describe oneself in a socially desirable way. Therefore, if a participant

scores highly on this scale they may be less likely to admit to victimisation or

perpetration behaviours. Therefore, to offset the limitations of self-report

measures future research should consider using multiple methods to capture peer

victimisation such as self-report combined with peer-reports or observations or

measure social desirability and control for this relationship in statistical analyses.

Using the Personal Experiences Checklist was also advantageous because it

is a well validated multi-item measure and such measures are considered more

valid, more accurate and more reliable than single item measures (Thomas, Connor

& Scott, 2015). Single item measures are less likely to fully represent multi-

dimensional theoretical models, they often lack precision, and they are prone to a

high degree of random error (Thomas, Connor & Scott, 2015). One of the important

features of this multi-item measure is that cultural and cyber victimisation are

considered part of overall victimisation and not as separate phenomena (Olweus &

Limber, 2018). However, the subscales for cultural and cyber

victimisation/perpetration demonstrated unacceptable internal consistency in the

current study. A possible reason for the cultural scale being inconsistent was that

the sample consisted of mainly one ethnic group (white British) and the scale was

validated in Australia, which is more culturally diverse. Use of a larger and more

diverse sample may help to alleviate this limitation in future studies. The age range

of the current sample may also have affected the internal consistency of the cyber

scale. Some of the items (e.g. '*Other kids say nasty things about me on websites

(e.g. Facebook)*') are limited by an age restriction or require a mobile phone (e.g. '*I

say nasty things to other kids by SMS (e.g. WhatsApp)*') and therefore, not all

participants have access to these mediums. The cyber questionnaire may need to

be updated often because technology moves on quickly and no longer captures the current methods of communication between youths (e.g. *'Other kids send me nasty emails'*). For future studies, such revisions of the scale should be considered.

The community-based sample included a range of sports and abilities and was large enough to satisfy the requirements of the analyses in this study. However, the prevalence of victimisation and perpetration reported by the sample was low. In addition, some of the statistical assumptions underpinning the analysis were violated and so it may be the case that the findings cannot be generalised beyond the current sample (Field, 2009). Employing a larger and more diverse sample could help to improve variance in prevalence scores and address statistical violations as greater sample sizes are less prone to these (Field, 2009).

The current study is cross-sectional in nature. Cross-sectional studies are useful for establishing initial relationships between variables and this was the first study to measure whether perfectionism predicts peer victimisation and perpetration. However, they have some limitations. That is, causal relationships between variables cannot be inferred. Longitudinal designs are now needed to determine if perfectionism is the antecedent (as suggested in this study) or outcome (as suggested by Miller and Vaillancourt, 2007; and Wilson et al. 2015) of peer victimisation and perpetration. This is because longitudinal studies can help determine temporal precedence (Caruana et al. 2015).

As peer victimisation has been found to be associated with negative outcomes such as anxiety, depression and suicidal thoughts (Miller & Vaillancourt, 2007; Evans et al. 2016), future studies should consider how to intervene in and

ultimately reduce the prevalence of peer victimisation and perpetration in sport.

One means to do so would be to investigate other related important predictive

factors so appropriate interventions can be implemented. For example,

interventions aimed at reducing anger or social loneliness (Bosworth, Espelage &

Simon, 1999; Acquah et al. 2016). Based on the findings here, managing other-

oriented perfectionism is likely to improve the psychological well-being of young

people and help ensure participating in sport is a more positive interpersonal

experience.

The responsibility of reducing peer victimisation in youth sport does not

solely lie with educating athletes and coaches on an individual level. The climate of

sport, both structurally and at a social-contextual level, are further areas in which

we might be able to intervene and offset the negative effects of other-oriented

perfectionism. At a structural level, sport is often a high-pressure and results driven

environment (Hill, 2013). These external pressures may underpin the development

of other-oriented perfectionistic tendencies. Recent theory has alluded to this

possibility; suggesting that external pressures may make one feel that as they must

adhere to such high standards that others should also be expected to meet high

standards (Appleton & Curran, 2016). That said, policy change may be needed to

help make positive changes at a structural level, which help temper the

development of other-oriented perfectionism in sports participants.

At a more immediate social-contextual level, the motivational climate

created by peers, parents, and coaches could also be influencing the development

of other-oriented perfectionism and amount of peer victimisation experienced in

youth sport. There are two prevailing motivational climates in youth sports. The first is a mastery-oriented climate, which promotes personal effort, learning and improvement (Schaillee, Theeboom & Van Cauwenberg, 2017). The second is a performance-oriented climate, which involves competition, social comparison and punishment. In terms of other-oriented perfectionism, a mastery-oriented climate would be unlikely to contribute to its development but a performance-oriented climate likely would. This is because a mastery-oriented climate allows for mistakes as part of a learning process whereas a performance-oriented climate emphasises success without effort and outperforming others (Atkins et al. 2015). Therefore, in a performance-oriented climate an athlete may expect teammates to reach standards in order to outperform the opposing team and be critical of teammates when they do not reach that expectation.

With respect to victimisation, peer to peer relations have been shown to be better quality in a mastery-oriented climate. Agans, Su and Ettekal (2018) found that young people perceiving a mastery-oriented peer climate showed the most positive character with regards to the self, teammates and the game. Whereas, in a perceived performance-oriented peer climate, young people have shown the least positive character and greater intra-team conflict. Perceptions of a performance-oriented climate also have been related to negative experiences in sport such as peer conflict (Schailee, Theeboom & Van Cauwenberg, 2017). Ommundsen et al. (2005) suggested that performance-oriented motivational climate may lead to less sensitivity, empathy and cooperation with teammates in pursuit of individual achievement and superior personal ability. Subsequently, this could lead to intra-

team rivalry and interpersonal conflict (Ommundsen et al. 2005). Therefore, it may

be beneficial for sports clubs and coaches to ensure coaches are promoting a

mastery- over a performance-oriented climate (Zanatta et al. 2018).

5. Conclusion

This study was the first to establish the relationships between perfectionism and peer victimisation and perpetration in youth sport. Previous research has found other-oriented perfectionism to play an important role in interpersonal behaviours (Stoeber, 2016). Here, other-oriented perfectionism was a significant positive predictor of the overall and physical perpetration of peer victimisation and experience of physical peer victimisation. In line with previous research, findings of the current study suggest that other-oriented perfectionism is the most problematic dimension in relation to interpersonal behaviours. Youth sport participants displaying characteristics of other-oriented perfectionism are likely to have greater interpersonal difficulties with their sporting peers.

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7. Appendices

7.1 Appendix 1. Ethical Approval Letter

York St John University,
Lord Mayors Walk,
York,
YO31 7EX

06/02/2018

York St John University Cross School Research Ethics Committee
(Health Sciences, Sport, Psychological and Social Sciences and Business)

Dear Laura,

Title of study: Perfectionism and Peer Victimisation in Youth Sport
Ethics reference: 140018622/06022018
Date of submission: 30/11/2017

I am pleased to inform you that the above application for ethical review has been reviewed by the Cross School Research Ethics Committee and I can confirm a favourable ethical opinion on the basis of the information provided in the following documents:

Document	Date
Ethics application form	30/11/2017

The Cross School Research Ethics Committee did provide some comments in relation to your application that you may wish to discuss with your supervisor.

1. To ensure participants are fully informed, it may be beneficial to include a definition of perfectionism in the information sheet.
2. The use of postcodes only as participant ID may, in some circumstances, lead to confusion. Should participants wish to withdraw or should there be safeguarding issues you must be able to correctly identify the participants.

Please notify the committee if you intend to make any amendments to the original research as submitted at date of this approval, including changes to recruitment methodology or accompanying documentation. All changes must receive ethical approval prior to commencing your study.

Yours sincerely,

Dr Anna Macklin

7.2 Appendix 2. Parental Information Sheet

Participant Information Sheet for Parents/Guardians

Name of school: School of Sport
Title of study: Perfectionism and Peer Victimisation in Youth Sport.

Introduction
My name is Laura Fenwick and I am a postgraduate student at York St John University, under the supervision of Dr Sarah-Mallinson Howard. As part of my studies I am examining the personality trait of perfectionism and if children have experienced peer-victimisation.

What is the purpose of this investigation?
Research suggests that peer-victimisation and perfectionism are associated with each other. There are different types of perfectionism and the expression of perfectionism can change depending on the domain (e.g. academia, sport). The aim of this investigation is to assess different dimensions of perfectionism in sport and see if they relate to experiences of peer-victimisation.

Does your child have to take part?
No, they don't have to. The decision to participate is your and your child's decision. If you provide consent for them to participate but your child decides they do not want to, they will not be forced to do so. Completing the questionnaire is completely voluntary. When completing the questionnaire your child can choose to miss out questions that they do not want to answer. Once the questionnaire has been completed if you or your child decides they no longer want to participate in the study, you can withdraw their data by contacting me via email before July 31st 2018 and the data will be removed. There is no consequence for refusing to take part or withdrawing from the study.

What will your child do in the project?
Your child will be asked to read an information sheet and consent form. If they agree to participate they will be given a questionnaire. The questionnaire will take approximately 15 minutes to complete. The questionnaire asks about the personality trait of perfectionism and how true each statement is for them. The questionnaire also asks about their experiences with peer-victimisation and is asked how frequently they have had these experiences since the start of the school year.

The questionnaire includes statements such as:
- People always expect my performances to be perfect.
- One of my goals is to be perfect in everything I do.
- Other kids ignore me on purpose.
- I say mean things behind other kids' backs.

After completing the questionnaire your child will be provided with another information sheet that will include websites, helplines and who they can contact if they require support. As a thank you for taking part in the study your child will be given a water bottle.

Why has your child been invited to take part?
For this project we are interested in the experiences of 11-16 year olds. As your child's sports club has agreed to participate all members within the age bracket have been invited to participate.

What are the potential risks to your child in taking part?
We do not anticipate that your child will be affected in any way by participating in this study. There is potential for your child to become upset when answering some of the questions. To minimise the risk your child will be given an information sheet explaining the nature of the questions and they can decide not to take part in the study. If they decide to participate they are free to miss out any questions they don't want to answer or withdraw from the study. After completing the questionnaire your child will be given an information sheet with contact details of useful websites and helplines should they require support. You or your child has the right to withdraw from the study until the end of July, by contacting me via email.

What happens to the information in the project?
All information will be kept completely confidential. At the beginning of the questionnaire we ask for a postcode, this information will be used in the event you or your child wishes to withdraw from the study, otherwise the postcode is not used. Paper copies of the questionnaire will be stored in a locked filing cabinet in the Graduate Centre at York St John University. On completion of the study all hard copy data will be digitized and stored on an encrypted memory stick. All hard copy data will then be destroyed. The data will be reported collectively and no identifying information on the club or individual will be included.

Upon reading the responses to the questionnaire if they are concerns for the health or safety of your child, their name and the nature of our concerns, but not the responses of the questionnaire, will be passed on to the club to be managed within the safeguarding policies.

Thank you for reading this information – please ask any questions if you are unsure about what is written here.

What happens next?
Thank you for reading this information. If you are happy for your child to participate in this study they will be given an information sheet and asked to provide consent to take part. If they give their consent they will then be given the questionnaire to complete. If you do not want your child to participate in this study please sign and return the attached form to your child's club.

After the investigation your child's club will be provided a summary of the results. It is possible that the results of this study may be published. There will be no information published that would enable clubs or individuals to be identified.

This investigation was granted ethical approval by the York St John University Cross School Research Ethics Committee (Health Sciences, Sport, Psychological and Social Sciences and Business).

Researcher contact details:

Laura Fenwick	**Dr Sarah Mallinson-Howard**
School of Sport	School of Sport
York St John University,	York St John University,
Lord Mayors Walk,	Lord Mayors Walk,
York,	York,
YO31 7EX	YO31 7EX
Email: laura.fenwick@yorksj.ac.uk	Email: s.mallinson-howard@yorksj.ac.uk

If you have any questions/concerns, during or after the investigation, or wish to contact an independent person to whom any questions may be directed or further information may be sought from, please contact:

Anna Macklin
School of Psychological and Social Sciences
York St John University,
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York,
YO31 7EX
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7.3 Appendix 3. Parental Consent Form

Parental Consent Form

Name of school: School of Sport
Name of researcher: Laura Fenwick
Title of study: Perfectionism and Peer Victimisation in Youth Sport.

Please read the following statements and return the form if you **do not** give consent to your child participating.

☐ I confirm that I have read and understood the information sheet for the above project and the researcher has answered any queries to my satisfaction.

☐ I understand that my child's participation is voluntary and that my child will be free to withdraw from the project at any time, up to the point of completion, without having to give a reason and without any consequences.

☐ I understand that anonymised data (i.e. data which do not identify my child personally) cannot be withdrawn once they have been included in the study (the end of July 2018).

☐ I understand that any information recorded in the investigation will remain confidential and no information that identifies my child or my child's sports club will be made publicly available.

☐ I **do not** consent to my child participating in the project.

Name of child	
Name of Parent/ Guardian (PRINT NAME)	
Signature of Parent/Guardian:	Date:

7.4 Appendix 4. Participant Information Sheet

Participant Information Sheet

Name of school: School of Sport
Title of study: Perfectionism and Peer Victimisation in Youth Sport.

Introduction
My name is Laura Fenwick and I am a postgraduate student at York St John University. My studies are being supervised by Dr Sarah-Mallinson Howard.

What is the purpose of this investigation?
I am looking in to personality, and how certain personality traits may be related to bullying in sport. The aim of my study is to look in to perfectionism and to see if it is related to being bullied or being a bully in sport. Perfectionism is about setting really high standards for yourself (or for others). It is also about harshly judging yourself (or others) if standards are not met.

Do you have to take part?
No you don't have to participate. Participation is voluntary. If you decide to take part you will be asked to fill in questionnaire. If you do not want to complete the questionnaire you don't have to. If you start to fill in the questionnaire and don't want to answer a question, just miss it out and move on to the next one. If you start to take part and then you change your mind, it is okay for you to stop. Once you have completed the questionnaire you can still withdraw from the study until the end of July 2018.

What will you do in the project?
After you have read this sheet, you will be given a consent sheet to read and sign if you agree to take part in the study. You will then be given a questionnaire. It should take you about 15 minutes to fill in. Some of the questions are about the personality trait of perfectionism. The other questions are about your experiences of bullying in your main sport since the start of the school year. Don't worry if you have not experienced any bullying, I am interested in all experiences. You will only have to fill in the questionnaire once. As a thank you for completing the questionnaire, you will be given a water bottle.

Why have you been invited to take part?
You have been invited to take part because you are aged 11-16 and are part of a sports club.

What are the potential risks to you in taking part?
You may find some of the questions upsetting. If you do not want to answer some of the questions it is okay for you to miss them out. It is okay for you not to take part in the study, and it is okay for you to drop out of the study even after completing the questionnaire. If you would like to drop out of the study after completing a questionnaire, you have until the end of July 2018 to get your parent/guardian to contact me to remove your information. After completing a questionnaire you will be provided with a list of websites and helplines that you can use for support.

What happens to the information in the project?
All of your answers will be completely confidential, so no one will know your answers. So please try to answer all of the questions truthfully. However, if we read you questionnaire

and are worried about your health or safety we will tell your club safeguarding officer so that support can be arranged for you. Even if we do that, we will not share anything you report in the questionnaire, we will only pass on your name. The information you provide will be stored on a password-protected computer. The paper copies of the questionnaires will be stored in a locked filing cabinet in the Graduate Centre at York St John University. On completion of the study all hard copy data will be digitized and stored on an encrypted memory stick. All hard copy data will then be destroyed.

Thank you for reading this information – please ask any questions if you are unsure about what is written here.

What happens next?

Thank you for reading this information. If you are happy to take part in the study please read and sign the consent form to confirm you agree to take part and start to fill in the questionnaire. If you do not want to take part, please return the blank questionnaire.

After the investigation your club will be provided a summary of the results. It is possible that the results of this study may be published. There will be no information published that would enable clubs or individuals to be identified.

This investigation was granted ethical approval by the York St John University Cross School Research Ethics Committee (Health Sciences, Sport, Psychological and Social Sciences and Business).

Researcher contact details:

Laura Fenwick	**Dr Sarah Mallinson-Howard**
School of Sport	School name
York St John University,	York St John University,
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If you have any questions/concerns, during or after the investigation, or wish to contact an independent person to whom any questions may be directed or further information may be sought from, please contact:

Anna Macklin
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YO31 7EX

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7.5 Appendix 5. Participant Assent Form

Consent Form

Name of school: School of Sport
Name of researcher: Laura Fenwick
Title of study: Perfectionism and Peer Victimisation in Youth Sport.

Please read and complete this form carefully. If you are willing to take part in this study, please tick the appropriate responses and sign and date the declaration at the end. If you do not understand anything and would like more information, please ask.

Please read the following statements and tick where appropriate.

☐   I have read and understood the information sheet for the study.

☐   The researcher has answered any questions I have.

☐   I understand that I don't have to take part if I don't want to.

☐   I understand that if I change my mind later I can ask my parent/guardian to contact you to remove my information as long as I do this before the end of July 2018.

☐   I understand that my answers to the questionnaire will remain confidential (secret) and no information that identifies me will be shared.

☐   I understand that if you are worried about my health or safety you will pass on my name only to my club safeguarding officer.

☐   I understand that if you do pass on my name, you will **<u>not</u>** share my questionnaire answers.

☐   I am happy to fill in the questionnaire.

(PRINT NAME)	
Sign:	Date:

7.6 Appendix 6. Questionnaire

Sex: Male/Female   Age:_____ Birthday Month:_____   Postcode:_____

Main Sport (which you train and compete in most often):_____

In comparison to all other activities in which you take part in, how important do you consider this sport to be for you? (Please circle a NUMBER on the scale below):

Extremely Unimportant		Moderately Unimportant		Neither Important nor Unimportant		Moderately Important		Extremely Important
1	2	3	4	5	6	7	8	9

Your highest level of competition in your main sport (e.g. International):_____

Number of hours spent training and competing per week in this sport:_____

Number of years competing in this sport:_____

Section A: Below are statements that reflect beliefs that athletes hold when taking part in sport. Some beliefs refer to other people. For these, think about the people involved in your sport participation whose opinion you value. Please read each of the statements carefully, and circle the number that shows how much you agree or disagree with each statement. Remember there are no wrong or right answers.

In my main sport…

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly agree	Agree	Strongly Agree
1. I am tough on myself when I do not perform perfectly.	1	2	3	4	5	6	7
2. People always expect more, no matter how well I perform.	1	2	3	4	5	6	7
3. I have a lower opinion of others when they do not perform perfectly.	1	2	3	4	5	6	7
4. I put pressure on myself to perform perfectly.	1	2	3	4	5	6	7
5. I think negatively of people when they do not perform perfectly.	1	2	3	4	5	6	7
6. I am never satisfied with the performances of others.	1	2	3	4	5	6	7

7. People always expect my performances to be perfect.	1 2 3 4 5 6 7
8. I criticise people if they do not perform perfectly.	1 2 3 4 5 6 7
9. People view even my best performances negatively.	1 2 3 4 5 6 7
10. I only think positively about myself when I perform perfectly.	1 2 3 4 5 6 7
11. To achieve the standards I have for myself I need to perform perfectly.	1 2 3 4 5 6 7
12. People criticise me if I do not perform perfectly.	1 2 3 4 5 6 7

Section B: Listed below are a number of statements about how people approach their sport and sport performance. Please read each of the statements carefully, and circle the number that shows how much you agree or disagree with each statement. Remember there are no wrong or right answers.

In my main sport…

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly agree	Agree	Strongly Agree
1. One of my goals is to be perfect in everything I do.	1	2	3	4	5	6	7
2. Everything that others do must be of top-notch quality.	1	2	3	4	5	6	7
3. The better I do, the better I am expected to do.	1	2	3	4	5	6	7
4. I strive to be as perfect as I can be.	1	2	3	4	5	6	7
5. It is very important that I am perfect in everything that I attempt.	1	2	3	4	5	6	7
6. I have high expectations for people who are important to me.	1	2	3	4	5	6	7
7. I demand nothing less than perfection from myself.	1	2	3	4	5	6	7
8. I can't be bothered with people who won't strive to better themselves.	1	2	3	4	5	6	7
9. Success means that I must work even harder to please others.	1	2	3	4	5	6	7
10. If I ask someone to do something, I expect it to be done flawlessly.	1	2	3	4	5	6	7
11. I cannot stand to see people close to me make mistakes.	1	2	3	4	5	6	7

12. I must work to my full potential at all times.	1 2 3 4 5 6 7
13. My family expects me to be perfect.	1 2 3 4 5 6 7
14. People expect nothing less than perfection from me.	1 2 3 4 5 6 7
15. People expect more from me, than I am capable of giving.	1 2 3 4 5 6 7
16. If I do not set very high standards for people I know, they are likely to end up second-rate people	1 2 3 4 5 6 7
17. I think less of people I know if they make mistakes.	1 2 3 4 5 6 7
18. If someone I know cannot do something really well, they shouldn't do it at all.	1 2 3 4 5 6 7
19. I cannot help getting upset if someone I know makes mistakes.	1 2 3 4 5 6 7
20. It is shameful for people that I know to display weakness or foolish behaviour.	1 2 3 4 5 6 7
21. An average performance by someone I know is unsatisfactory.	1 2 3 4 5 6 7
22. When someone I know fails at something important, it means they are probably less of a person.	1 2 3 4 5 6 7
23. If I scold others for their failure to live up to expectations, it will help them in the future.	1 2 3 4 5 6 7

Section C: Listed below are a number of ways kids can be nasty to each other. Please read each statement carefully and think about how often you have experienced the items **whilst participating in your <u>main sport</u> since the start of the school year in September.**

	Never	Rarely	Sometimes	Most days	Every Day
1. Other kids play nasty practical jokes on me where I might get hurt or injured.	0	1	2	3	4
2. Other kids ignore me on purpose.	0	1	2	3	4
3. Other kids try to turn my friends against me.	0	1	2	3	4
4. Other kids say nasty things to me on an instant messenger (e.g. Snapchat).	0	1	2	3	4
5. Other kids make fun of my language.	0	1	2	3	4
6. Other kids tease me about things that aren't true.	0	1	2	3	4
7. Other kids punch me.	0	1	2	3	4

8. Other kids make fun of my culture.	0	1	2	3	4
9. Other kids make prank calls to me.	0	1	2	3	4
10. Other kids threaten me over the phone.	0	1	2	3	4
11. Other kids tell people not to hang around with me.	0	1	2	3	4
12. Other kids won't talk to me because of where I'm from.	0	1	2	3	4
13. Other kids make death stares at me.	0	1	2	3	4
14. Other kids say nasty things to me by SMS (e.g. WhatsApp).	0	1	2	3	4
15. Other kids tell people to hit me.	0	1	2	3	4
16. Other kids send me nasty emails.	0	1	2	3	4
17. Other kids kick me.	0	1	2	3	4
18. Other kids say mean things about me behind my back.	0	1	2	3	4
19. Other kids make rude gestures at me.	0	1	2	3	4
20. Other kids say they'll hurt me if I don't do things for them.	0	1	2	3	4
21. Other kids shove me.	0	1	2	3	4
22. Other kids say nasty things about me on websites (e.g. Facebook)	0	1	2	3	4
23. Other kids wreck my things.	0	1	2	3	4
24. Other kids send me computer viruses on purpose.	0	1	2	3	4
25. Other kids tease me about my voice.	0	1	2	3	4
26. Other kids trip me over.	0	1	2	3	4
27. Other kids tell people to make fun of me.	0	1	2	3	4
28. Other kids call me names because I'm a bit different.	0	1	2	3	4
29. Other kids hit me.	0	1	2	3	4
30. Other kids harass me over the phone.	0	1	2	3	4
31. Other kids make fun of my friends.	0	1	2	3	4
32. Other kids call me names because I can't do something.	0	1	2	3	4

Section D: Listed below are a number of ways kids can be nasty to each other. Please read each statement carefully and think about how often you have **done these things to someone else whilst participating in your <u>main sport</u> since the start of the school year in September.**

	Never	Rarely	Sometimes	Most days	Every Day
1. I play practical jokes on other kids where they might get hurt or injured.	0	1	2	3	4
2. I ignore other kids on purpose.	0	1	2	3	4
3. I try to turn other kids' friends against them.	0	1	2	3	4
4. I say nasty things about other kids on an instant messenger (e.g. Snapchat).	0	1	2	3	4
5. I make fun of other kids' language.	0	1	2	3	4
6. I tease other kids about things that aren't true.	0	1	2	3	4
7. I punch other kids.	0	1	2	3	4
8. I make fun of other kids' culture.	0	1	2	3	4
9. I make prank calls to other kids.	0	1	2	3	4
10. I threaten other kids over the phone.	0	1	2	3	4
11. I tell people not to hang around with other kids.	0	1	2	3	4
12. I won't talk to other kids because of where they're from.	0	1	2	3	4
13. I make death stares at other kids.	0	1	2	3	4
14. I say nasty things to other kids by SMS (e.g. WhatsApp).	0	1	2	3	4
15. I tell people to hit other kids.	0	1	2	3	4
16. I send nasty emails to other kids.	0	1	2	3	4
17. I kick other kids.	0	1	2	3	4
18. I say mean things behind other kids' backs.	0	1	2	3	4
19. I make rude gestures at other kids.	0	1	2	3	4

20. I say I'll hurt other kids if they don't do things for me.	0	1	2	3	4
21. I shove other kids.	0	1	2	3	4
22. I say nasty things about other kids on websites (e.g. Facebook).	0	1	2	3	4
23. I wreck other kids' things.	0	1	2	3	4
24. I send other kids computer viruses on purpose.	0	1	2	3	4
25. I tease other kids about their voice.	0	1	2	3	4
26. I trip other kids over.	0	1	2	3	4
27. I tell people to make fun of other kids.	0	1	2	3	4
28. I call other kids names because they are a bit different.	0	1	2	3	4
29. I hit other kids.	0	1	2	3	4
30. I harass other kids over the phone.	0	1	2	3	4
31. I make fun of other kids.	0	1	2	3	4
32. I call other kids names because they can't do something.	0	1	2	3	4

7.7 Appendix 7. Debrief Form

Debrief Sheet

Name of school: **School of Sport**
Title of study: **Perfectionism and Peer Victimisation in Youth Sport.**

We know that bullying can sometimes relate to sad and negative feelings. The questionnaire you have just completed asks questions on some challenging topics. If you want to find out more about some of these topics, or talk to someone about these issues, you can talk to the following people or organisations:

- At your sports club you can talk to _____, or to any other adult who you know and trust.
- Outside of your club if you are being bullied please talk to someone at home about what is going on.
- Outside of your sports club you can talk to someone at Childline by telephoning 0800 1111
- Or you can visit the Childline website for more information: https://www.childline.org.uk/info-advice/bullying-abuse-safety/types-bullying/bullying/

To learn more about perfectionism:
https://www.adavic.org.au/files/cms/Fact%20Sheets/Tip%20Sheet%20-%20Perfectionism%20-%20ADAVIC%20-%202014%20-%20Nov.pdf

Please keep this sheet alongside your participant information sheet as this includes lots of information on the questionnaire you have just filled in.

Researcher contact details:

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If you have any questions/concerns, during or after the investigation, or wish to contact an independent person to whom any questions may be directed or further information may be sought from, please contact:

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