

This item is the archived peer-reviewed author-version of:

Psychological, physical, and sexual violence against children in Australian community sport : frequency, perpetrator, and victim characteristics

Reference:

Pankowiak Aurelie, Woessner Mary N., Parent Sylvie, Vertommen Tine, Eime Rochelle, Spaaij Ramon, Harvey Jack, Parker Alexandra G..- Psychological, physical, and sexual violence against children in Australian community sport : frequency, perpetrator, and victim characteristics
Journal of interpersonal violence - ISSN 1552-6518 - Thousand oaks, Sage publications inc, 38:3-4(2023), p. 4338-4365
Full text (Publisher's DOI): <https://doi.org/10.1177/08862605221114155>
To cite this reference: <https://hdl.handle.net/10067/1900450151162165141>

Abstract

Background: Childhood sport participation is associated with physical, social and mental health benefits, which are more likely to be realised if the sport environment is safe. However, our understanding of children's experience of psychological, physical and sexual violence in community sport in Australia is limited. **Objective:** To provide preliminary evidence on the extent of experiences of violence during childhood participation in Australian community sport and to identify common perpetrators of and risk factors for violence. **Participants:** There were 886 participants; most were women (63%) and about a third were men (35%). Respondents participated in over 60 sports. **Methods:** The Violence Towards Athletes Questionnaire (VTAQ) was administered online to a convenience sample of Australian adults (>18 years), retrospectively reporting experiences of violence during childhood community sport. **Results:** 82% of participants experienced violence as a child in sport. Psychological violence was most prevalent (76%), followed by physical (66%) and sexual (38%) violence. Peers perpetrated the highest rates of psychological violence (69%), and the rates of coach physical and psychological violence (both >50%) were also high. Age, sexual orientation, disability and hours of weekly sport participation as a child were all associated with childhood experience of violence in sport. **Conclusions:** The rates of interpersonal violence against children in sport were high. Novel data on perpetrators of the violence and the risk factors for experiencing violence provides further context to inform sport safeguarding strategies. A national prevalence study is recommended to advance our understanding of the childhood experiences of violence in Australian sport.

Keywords: interpersonal violence, sport, prevalence, child abuse, violence in sport

Psychological, physical and sexual violence against children in Australian community sport: frequency, perpetrator and victim characteristics

Introduction

Sport is woven into the fabric of Australian culture from a young age.

Internationally, Australia is a leading nation in youth sport participation, with the latest national survey indicating 63% of children (under 18 years) participate in organised sport or physical activity outside of school at least once per week (Australian Sports Commission, 2018). While research demonstrates the mental, physical and social benefits of sport participation for children (Eime et al., 2013), for these benefits to be actualized the sport environment must be emotionally and physically safe.

In recent years, failures to safeguard children from interpersonal violence (IV) in sport have dominated the international sport media (e.g., UK Soccer and USA gymnastics). Much of the media attention has focused on high-profile sexual abuse cases against elite athletes; however, IV against children in sport reaches beyond the sexual forms of violence in the elite sphere (Parent et al., 2020b; Vertommen et al., 2016). Emerging international evidence indicates that violence against child participants and athletes¹ in sport is neither competition level specific nor sport specific, with violence occurring across a range of competition levels and sports (Parent et al., 2020b; Vertommen et al., 2016). Moreover, there is a need to understand IV under its broader definition encompassing various forms of violence including psychological/neglect, physical and sexual and to consider who may be more at risk of experiencing certain types of violence in order to inform the development of targeted prevention strategies (Mountjoy et al., 2016; Parent et al., 2018; Parent et al., 2020b).

The issue of violence against children in sport has risen to global recognition as a key threat to sport integrity (Mountjoy et al., 2016). In Australia, national child safeguarding policies have been developed, with the creation of Sport Integrity Australia, including the Safeguarding in Sport Continuous Improvement program which aims to “embed safeguarding practices, processes, and education” (Sport Integrity Australia, 2021, p. 20) in National Sporting Organisations. However, there is limited understanding of the occurrence of interpersonal violence against Australian children participating in community sport. This knowledge could inform the development of targeted prevention and response interventions, as well as provide baseline measures, which could be used to monitor the effectiveness of prevention strategies. As such, the purpose of this study was to measure psychological/neglect, physical and sexual violence perpetrated against children participating in community sport in Australia.

Literature review

The Frequency of Interpersonal Violence in Sport

While IV against athletes has only recently been part of public mainstream discussions, researchers have studied the phenomena for several decades. Thus far, studies on IV against athletes and participants have measured one particular type of violence, mainly sexual harassment and abuse, especially against girls/women participants/athletes (Chroni et al., 2009; Fasting et al., 2003; Fasting et al., 2010; Leahy et al., 2002; Parent et al., 2016; Rintaugu et al., 2014). Other studies have reported the frequency of bullying against children in community and in elite sport (Baar et al., 2011; Evans et al., 2016; Gendron, 2011) and hazing in American high-school and college sport (Allan, 2009; Fields et al., 2010; Jeckell et al., 2018).

Research on IV is evolving and experts are advocating for the need to study the experience of violence in all of its forms. Herein we adopt the World Health Organisation (WHO) definition of violence that underpinned the development of the Violence Towards Athletes Questionnaire (VTAQ) instrument implemented in this study (Krug et al., 2002; Parent et al., 2019). In WHO's definition, violence is conceptualised as the intentional, threatened or actual use of either physical force or power that is likely to result in "injury, death, psychological harm, mal-development or deprivation" (Krug et al., 2002, p. 1084). This holistic definition of violence encompasses forms of violence not previously considered in research, which has traditionally focused solely on sexual abuse. In addition, authors of the International Olympic Committee consensus statement on harassment and abuse in sport (Mountjoy et al., 2016), and other experts (Parent et al., 2017; Parent et al., 2019; Parent et al., 2020b) agree on the importance of furthering the collective understanding of the links between different types of IV against athletes and children in sport, as well as of the risk factors potentially predicting these different types of IV, in order to inform prevention strategies. As a result, more recent studies have assessed the frequency of IV against children in sport by measuring different categories of violence, including predominantly psychological, physical and sexual violence (Table 1) (Bermon et al., 2021; McPherson et al., 2015; Parent et al., 2016; Vertommen et al., 2016). These studies reported high, yet varying rates of psychological violence (from 38% to 80%), physical violence (from 9% to 40%) and sexual violence (from 7% to 28%). One explanation for the discrepancies in the prevalence rates identified in these studies relates to the sampling approach used. For example, one study used a representative sample of the population (Vertommen et al., 2016), another a convenience sample (Parent et al., 2020b) and another a purposeful sample (Bermon et al., 2021). Different measurements tools could

also contribute to the inconsistencies as within these tools the violence types are often defined and operationalised differently. Indeed, psychological, physical and sexual violence are complex concepts to define and measure, which is confounded by the lack of consensus on definitions and the lack of a commonly used and validated measurement tools.

Validated Tools and Comparative Data

One challenge with ascertaining the frequency of violence against children in sport is the limited availability and existence of validated surveys. In recent years, several survey instruments have been developed to measure IV against children in sport, but not all have been validated nor implemented in different cohorts or countries (Table 1) (Parent et al., 2018; Parent et al., 2019; Parent et al., 2016; Vertommen et al., 2016). Validated survey instruments provide confidence that the results obtained are psychometrically sound and reliable. They also provide a foundation for the collection of comparable data either longitudinally within a country or internationally between countries. One such recently developed survey instrument is the Violence Towards Athletes Questionnaire (VTAQ) which was designed to measure instances of multiple types of IV perpetrated against children in sport by either their peers, coaches or parents/ guardians (Parent et al., 2019).

The VTAQ advanced the conceptualisation of IV against children in several ways. Beyond measuring psychological, physical and sexual violence, it also measures neglect. Neglect is generally defined as a failure to provide for the development of a child, failing to protect them from harm, or causing harm to their health and wellbeing. An example of neglect in the sporting context would be permitting a child to participate in sport (training or competition) while they are injured and/or in contradiction to medical advice (Parent et al., 2019). Neglect is a well-recognised form of violence

against children and is often categorised broadly with psychological violence, but there is currently limited empirical evidence of experiences of neglect in sport (Mountjoy et al., 2016). The VTAQ also advances the conceptualisation of psychological violence by re-classifying items which previous literature aligned within the physical category into psychological violence. For example, while Alexander et al. (2011) indicated that forced training when injured was physical violence, the VTAQ classifies this as a form of psychological violence (Parent et al., 2019). Finally, the VTAQ includes neglect, psychological, physical and sexual violence items that are specific to a perpetrator (i.e. a peer player/ athlete, a coach, a parent/ guardian). Other tools have either not included perpetrator-specific measurements, or included them only as a contextualisation of the violence, whereas VTAQ allows for ready identification of the role of the perceived perpetrator (Bermon et al., 2021; Vertommen et al., 2016). The VTAQ was only recently developed, and as such has only been implemented in the Quebec (French Canadian) context, but has been validated in Dutch (Flemish) (Vertommen et al., 2021). The use and further validation of the tool in other countries and languages across the range of violence domains (psychological/neglect, physical and sexual) is a critical progression of this field of research and will allow for directly comparable data. Understanding the extent of and types of violence occurring within Australian community sport could highlight Australia-specific trends or patterns in the experiences of violence that can inform targeted prevention and intervention strategies.

Role of Perpetrators and Relevant Sociodemographic Variables Related to Experiences of Violence

Efforts to prevent IV in sport would benefit from a contextualisation of both the perpetrators of specific types of IV as well as the risk factors for being a victim of IV.

The coach-athlete relationship has been a predominant focus in the IV in sport

literature, but emerging evidence suggests that studying peer violence is of significant value as well (Brackenridge et al., 2002; Johansson et al., 2016; Vertommen et al., 2017). Moreover, to our knowledge, no study to date has explored the role of parents as perpetrators of IV in sport in Australia. Given that in Australia more than two thirds of volunteers are part of the organization and delivery of community sport clubs, understanding the role they play in the perpetration of (Sport Australia, 2021) violence against children in sport is critical.

With regard to sociodemographic factors related to experiences of violence, recurrent findings support the notion that risks of sexual violence (the most heavily studied form) are generally higher for girls/women than they are for boys/men (Fasting et al., 2003; Leahy et al., 2002; Vertommen et al., 2016). In contrast, the frequency of physical violence has been observed to be higher for boys/men (Parent et al., 2020b). The gendered nature of other types of IV, however, is less clear with disparate findings in terms of the gendered experience of violence between countries (Parent et al., 2020b; Vertommen et al., 2016). Elucidating the gendered experience of violence (in terms of type of violence as well as perpetrator) could further inform targeted prevention efforts. Moreover, to our knowledge, none of the studies exploring national frequencies of violence during childhood sport have reported the experiences of gender diverse individuals (those who identify as neither a man nor a woman).

Other victim characteristics that are associated with experiences of IV that have arisen from the literature include aspects such as age, sexual orientation, disability and higher hours of sport practice per week. Previous studies have notable differences amongst these risk factors, with one study indicating older age increased risk of experiencing any type of IV and another suggesting the opposite (Parent et al., 2020b; Vertommen et al., 2016). Victims having a sexual orientation other than heterosexual

has commonly been identified as a risk factor for various forms of IV, but the differential categorisations of sexual orientation across studies challenges the comparability, with some seeking to compare all non-heterosexual orientations against a heterosexual one (Parent et al., 2020b), and others adopting more categories (heterosexual versus bisexual versus gay) (Vertommen et al., 2016). Disability has also been identified as a risk factor for sexual and physical violence in one study (Vertommen et al., 2016), but did not predict any type of violence in the recent study using the VTAQ (Parent et al., 2020b). Further elucidating disability as a potential risk factor is an important aspect of this study, given that it is an established risk factor for violence in contexts outside of sport (Hahn et al., 2014). Finally, increased hours of weekly sport participation has been found to predict experiences of both psychological and physical violence (Parent et al., 2020b), but this was in a sample comprised of athletes from diverse levels of competition (local through internationally competitive athletes). Whether this remains a risk factor at the community level of sport remains unknown.

With regard to the role of the specific perpetrators of violence in sport, historically much of the focus has been on peers or coaches. However, in the VTAQ, the parents are included as a third category of perpetrators of psychological, physical and neglect violence in the sport context specifically. Parent et al. (2019) distinguishes general parental neglect from parental violence in sport by prefacing all questions in the VTAQ-P (parent component) with the following statements: “Because of your athletic performance or your behavior in training or competition, one of your parents...” or “In a sporting environment one of your parents, step-parents, or legal guardians...” This phrasing, followed by the sport-specific items, distinguish violence that occurs

within the sporting context from other forms of violence and includes elements of physical, psychological or neglect based violence.

Aims of the Study

The aims of this study were threefold: the first aim was to retrospectively assess the frequencies of experiences of psychological (inclusive of neglect), physical and sexual violence against children in Australian community sport using the VTAQ tool; the second aim was to identify the types and frequencies of violence perpetrated by specific actors (peers, coaches and parents); and the third aim was to determine whether certain demographics were associated with experiencing specific types of IV in sport.

Methods

Recruitment and Data Collection Procedures

Retrospective, anonymous reporting using an online survey was conducted with a convenience sample of adults (over 18 years) who self-identified as having played Australian community sport as a child (before the age of 18 years). Survey respondents were recruited through two streams of advertising: a/ researchers associated with the project promoted the online questionnaire through various social media platforms of the study investigators (Facebook, Twitter and LinkedIn) and b/ [redacted for anonymity during peer review] disseminated the survey link to individuals on their membership database who had completed the organisation's Child Protection Online Course. The investigators further used Facebook targeted advertisements (paid promotion) to broaden the potential reach of advertisement. To mitigate the risk of only recruiting participants who had experienced violence in sport, the advertisement's language did not contain words such as "abuse", "violence" (or related words). The advertisement

stated that the study was on the topic of safeguarding and aimed to understand the experiences of children in community sport in Australia.

Interested individuals could access, through a hyperlink, the online questionnaire hosted on the [Institution name retracted for anonymity] Qualtrics secure platform. The landing page of the questionnaire was a participant information sheet and consent form, which provided detailed information in lay language about the aims of the project (including the purpose of measuring violence), how the data would be used and clause around confidentiality and anonymity. If the individuals consented to participation, they were automatically progressed to the start of the VTAQ survey tool. If individuals chose not to participate, they were redirected to an end of survey landing page that provided a brief debriefing statement which included counselling resources they could contact. This debriefing statement was also included at the end of the full survey and counselling resources were linked at the bottom of every survey page. The research study was approved by [Institution name retracted for anonymity] Human Research Ethics Committee (#HRE20-150).

The Survey Instrument

The VTAQ was used to assess self-reported experiences of violence in Australian sport for children and youth (Parent et al., 2019). The VTAQ was first validated in the Quebec (French Canadian) context and originally consisted of 76 items that assess the psychological/neglect, physical and sexual violence experienced by children, perpetrated by either a peer, coach or parent/guardian (Parent et al., 2019). Definitions for each form of violence are detailed within the original manuscript by Parent et al. (2019). For use in this study, the VTAQ was translated from French to English by the original research team (Parent et al., 2020a). The translation to an English version of the VTAQ has been made using Corbière et al. (2014) back

translation procedure. The questions were framed in a retrospective manner. The VTAQ is currently undergoing a refinement process whereby items have been broken down into sub questions and the survey tool is being validated in English. For example, items C8, C9 and P8 were each originally used as single items on the validated questionnaire and were all classified as physical violence (Parent et al., 2019). In the current version of VTAQ, these items C8, C9 and P8 have been subdivided into three separate survey items, each denoted as original classification (C8, C9 and P8) plus the letter a, b or c (e.g. C8a), creating a total of nine items instead of three and bringing the overall tool to 76 items in total. We have implemented the tool with this English version (76 items), but to align with the original validation, we have maintained the same classification of violence type (physical) for all sub-classifications of the original survey items C8, C9 and P8. To adapt the questionnaire for use as a retrospective tool, only slight modifications were made i.e. the word “As a child (under the age of 18 years)” were added to the front end of every question. In this way, the tool was able to be implemented in a sample of Australian adults and used to assess retrospective incidences of violence experienced when they were below the age of 18 years.

The VTAQ is subdivided into three distinct sections, each focusing on a different type of perpetrator (peer, coach or parent). All responses are recorded on a 4-point scale measuring the frequency of experiences of violence (0=never; 1=rarely, 1-2 times; 2= sometimes, 3-10 times; and 3= often, more than 10 times). In the original validation of the survey (Parent et al., 2019), categorized each question into a type of violence (physical, n=19, psychological/neglect, n=37, or sexual n=14) and further subdivided the category psychological violence into psychological violence (n=28) and neglect (n=9), and the category sexual violence into sexual harassment (n=4), sexual abuse with no contact (n=4) and sexual abuse with contact (n=6). These same categories

were utilized in the present study, with the six new items described above (C8, C9, P8 a and b) being similarly classified, increasing the total items relating to physical violence to n=25. Of note, each perpetrator category did not include questions relating to all three forms of violence. Peer questions included psychological (not inclusive of neglect), physical and sexual. Coach questions included all three forms (inclusive of neglect), and parents included psychological/neglect and physical. While the survey was predominantly comprised of the VTAQ items, it also included demographic questions (age, sex, gender, sexuality, ethnicity, etc.) as well as questions regarding their sport participation (type of sport, hours per week, etc.).

The VTAQ items were grouped in various ways that represented types and subtypes of violence, types of perpetrator, and combinations thereof. Internal consistency reliability was established for each grouping of survey items, with Cronbach's alpha values ranging from 0.65 to 0.95.

Statistical Analysis

The survey items were grouped in various ways that represented types and subtypes of violence, types of perpetrator, and combinations thereof. Cronbach's alpha was calculated for each grouping of survey items to provide a measure of internal consistency reliability. Consistent with Parent et al. (2020), a low threshold of experience of violence (no experience versus any experience) was adopted in the present study. Firstly, for each type and sub-type of violence, each respondent was classified dichotomously, with 0 = no experience of this type/sub-type of violence, and 1 = at least one experience of this type/sub-type of violence, i.e. a non-zero response for at least one item. This dichotomization of data is in alignment with the other study that has implemented VTAQ and allows for directly comparisons of the findings Secondly, a

similar dichotomous classification was made for each type of perpetrator, with 0 = no experience of violence by this type of perpetrator, and 1 = at least one experience of violence by this type of perpetrator. Finally, a similar dichotomous classification was made for each combination of type/sub-type of violence and type of perpetrator.

For each of the three sets of types (of violence, perpetrator, and combination of violence and perpetrator), frequencies of experiences of violence are presented by gender. Chi-square tests were conducted to determine differences between men and women, and also between men and women combined and gender diverse individuals. To explore the risk factors for each of the three primary categories of violence, a binary multiple logistic regression was conducted. The potential socio-demographic factors included age, biological sex, sexual orientation, disability, sport type (participating in only individual sport, only team sport, or both individual and team sport), and hours per week of sport participation during childhood. Significance for all tests was set at $p < 0.05$. Analyses were conducted using SPSS Version 27.

Results

The Survey Respondents

A total of 1191 individuals accessed the survey and completed the consent form. Of those, 25 declined to participate, a further 104 did not meet inclusion criteria (i.e. over the age of 18 and did not participate in Australian community sport as a child), and a further 176 did not complete any demographic data and/or did not respond to any of the VTAQ questions. This left 886 respondents in the final sample. Individuals were included in the final sample for analysis if they responded to all initial demographic questions, and at least one subsection of the VTAQ. The final sample included 561 (63.3%) women, 308 (34.8%) men and 17 (1.9%) individuals who identified as either

“non-binary”, [gender] “questioning” or “don’t know”, these individuals were grouped together into the “gender diverse individuals ” category for analysis purposes. The mean age was 42 years (SD=15), with 18% of individuals being aged 25 years or younger. Respondents represented all eight States/Territories in Australia, with the largest number of respondents indicating they currently live in either Victoria (n=209, 34.9%) or New South Wales (n=212, 23.9%). Most respondents (83.9%) further indicated that their current State of residence is the same one they lived in as a child under the age of 18 years. The vast majority of respondents (94.9%) were born in Australia, with a small percentage also from UK/Channel Islands/Isle of Man/Ireland (1.4%) and New Zealand (1.2%). 118 individuals (13.3%) indicated that they have a disability (i.e. any form of disability/ condition that restricts their life and has lasted/will likely last 6 months or more). Twenty two individuals indicated they identify as Aboriginal and/or Torres Strait Islander. Most individuals indicated that their primary sport was team-based (70.4%). More than half (55.6%) of the respondents indicated that they participated in a secondary sport that was equally important to them as their primary sport. Participants self-reported playing in a total of 68 different sports. When breaking down the sports according to gender, the top three childhood sports reported by men were Australian football (27%), cricket (25%) and football/soccer (19%) and for women were netball (44%), swimming (13%) and dancing (12%); and the top childhood sports reported by individuals who identified as either “non-binary”, “questioning” or “don’t know” were swimming (24%) and then athletics, Australian football and cricket, all at 18%. Lastly, the majority of respondents (70%) indicated they are sexually attracted to only people from the opposite sex. In descending order, the rest of the sample indicated sexual attraction to: primarily people from the other sex (8%); people from the two sexes (5%); primarily people from the same sex (2%); only people from the same sex (2%); and the

remaining individuals indicated they were questioning, had never thought about it, preferred not to answer or were asexual (13%).

Prevalence of the Types of Violence

The majority of the survey respondents reported experiencing psychological violence/neglect (76%) or physical violence (66%) when participating in sport as a child (Table 2). More than one third of all respondents reported experiencing sexual violence (38%). Women and gender diverse individuals experienced higher rates (significantly higher for women, $p=0.049$) of psychological violence and neglect as a child compared to men. Women had higher rates of both overall sexual violence ($p=0.039$) and sexual harassment ($p=0.027$) than men. Women also reported experiencing higher rates of sexual abuse with and without contact as a child than men did, however the differences were not statistically significant.

Figure 1 illustrates the frequency of an individual having experienced one or more types of IV during their childhood sport participation. One third of respondents reported having experienced all three forms of IV (not necessarily at the same time) in community sport as a child. There was further overlap in the experiences of physical and psychological violence (25%), and psychological and sexual violence (13%). Eighteen percent (18%) of the overall sample indicated they had never having experienced any form of violence in sport as a child.

Rates of Reported Violence Perpetrated by Peers, Coaches and Parents

Table 3 shows that peer sport players perpetrated the highest prevalence of any type of violence (73%), followed by coaches (60%) and parents (35%). Women reported higher rates of violence ($p=0.001$) from a parent as a child than men.

Table 4 illustrates the breakdown of the sub-types of violence by perpetrator. Results indicate that the highest frequencies of experiences of childhood violence in the survey respondents were peer psychological violence (69%), followed by coach physical violence (55%) and coach psychological violence (54%). The frequencies with which gender diverse individuals experienced childhood psychological (81%, $p=0.026$) and physical (81%, $p=0.035$) violence from a coach were significantly greater than the men and women groups combined. The rate of childhood peer sexual harassment was also relatively high in the total sample (31%), with gender diverse individuals experiencing significantly higher rates (59%, $p=0.014$) than men and women combined (31%). Compared to men, women further experienced significantly higher rates of childhood neglect from either parents (17%, $p<0.001$) or coaches (24%, $p<0.001$) as well as sexual harassment (19%, $p<0.001$) and sexual abuse with contact (4%, $p=0.030$) perpetrated by a coach.

Socio-Demographic Predictors for Interpersonal Violence

Results from the multiple logistic regression analyses, as displayed in Table 5, indicate that psychological violence was less likely to be experienced by those who were older at the time of survey completion (“age” category) (OR 0.97), had a disability at the time of completion of the survey (OR 1.89) or practiced a higher number of hours each week as children (OR 1.07). Non-heterosexual individuals were more likely to report sexual violence (OR 1.91). Physical violence, was less likely to be reported by older (at the time of survey completion) individuals (OR 0.98), individuals who played sport a higher number of hours per week (OR 1.07) and who played only team sports (OR 1.49).

Logistic regression models fitted to the violence sub-types (results not tabulated) indicate that men were less likely than women to report experiencing neglect as a child

(OR 0.55, $p=0.01$), and those who were not heterosexual were almost twice as likely as heterosexuals to report experiencing neglect as a child (OR 1.77, $p=0.009$).

Discussion

This is first national study in Australia to investigate the frequencies of experiences of psychological/neglect, physical and sexual violence against children in community sport using a validated survey tool (VTAQ). In this sample of 886 Australian adults, 82% reported having experienced some form of IV during childhood sport participation, and the majority of individuals in our sample experienced at least two types of IV and 33% experienced all three types. While these results are novel in Australian sport, they are relatively unsurprising given that much of the available evidence suggests that individuals often experience more than one type of violence (Mountjoy et al., 2016; Parent et al., 2020b; Vertommen et al., 2016).

Psychological violence was the most prevalent violence (76%) reported in our study. This finding mirrors those of Parent et al. (2020b) who reported frequencies of 81% for psychological violence using the same survey tool. Both the frequencies in Australia and Canada were almost twice those found in a larger prevalence study in the Netherlands/Belgium that used a different survey tool as well as a representative sample (Vertommen et al., 2016). With reference to the different tools, the subtle variations in the conceptualization of psychological violence as well differences in the number of items (VTAQ has more items for this type of violence) could explain some of the disparate findings.

Rates of physical violence (65.6%) in our sample were almost double those reported by Parent et al. (2020b) (39.9%), and six times those found by Vertommen et al. (2016) (11%). It is possible some of the discrepancy between our findings and those of Parent et al. (2020b) are due to the splitting of three original physical survey items

into nine physical items, as explained in the methodology section. However, that alone is unlikely to account for the difference and could suggest differences between countries are present and/or the aforementioned differences in sampling and instruments.

Our findings for sexual violence follows a similar pattern to previous work, with the most common experience being sexual harassment (37.6%) followed by sexual abuse with contact (4.0%) and without contact (4.1%). Not all studies distinguish between the subtypes of sexual violence in this same manner; Vertommen et al. (2016) implemented a severity score for the types of IV, with sexual abuse with contact ranking as most severe. Their finding of 5.5% for severe sexual violence is similar to ours (4.1%).

Understanding who perpetrates various types of IV in youth sport is important to develop tailored preventions and response strategies, and yet, few national prevalence studies have explored this aspect of violence (Vertommen et al., 2016). While much of the IV in sport literature has focused on coaches' abuse of athletes, there is an increasing focus on peer-to-peer abuse (Bjornseth et al., 2018; Brackenridge et al., 2002; Johansson et al., 2016). In this current study, 73% of individuals reported at least one instance of IV perpetrated by a peer, and 60% experienced some type of IV from a coach. When exploring the frequencies of types of IV by perpetrator, our data indicates that 69% of individuals experienced psychological violence perpetrated by peers and 54% experienced it from a coach. While not many studies to date have explored the perpetrator profile for subcategories of IV, one study highlighted the predominance of peers as perpetrators of IV in sport (Vertommen et al., 2017) and Vertommen et al. (2017) further concluded that this was most frequently present in the form of psychological violence. The high percentage (>50%) of individuals in our sample who experienced coach perpetrated physical and psychological violence has not been

reported previously, though Vertommen et al. (2017) did illustrate that of those who experienced physical or psychological violence, 43% and 38% respectively indicated the coach as the perpetrator. Overall this trend of high rates of peer-to-peer violence as well as coach violence speaks to the potential issue of violence normalization within the sport environment (Fournier et al., 2021; Parent et al., 2018; Vertommen et al., 2018). Indeed a recent article by Fortier et al. (2020) speaks to this point in more depth, highlighting children's perceptions of how violence can be normalized as a necessary component of sport to win, prove their worthiness, or to not end up a victim themselves. This suggests that to truly address prevention of violence in sport, we must first broach the topic of why and how violence is currently being normalized, particularly violence that, if conducted external to the sport environment, would not be permitted (Fortier et al., 2020).

The role of parents in the perpetration of violence against children in sport is poorly understood at present, but is of critical importance, particularly at the community sport level when parents make up two thirds of the sport volunteer workforce in Australia (Sport Australia, 2021). Our data is some of the first to illustrate the prevalence of various types of violence in sport perpetrated by parents, and the high rates, particularly for psychological violence (~30%) are alarming. Some of the items underpinning psychological violence (e.g. criticizing performance) also align with issues of normalizing violence under the notion of a win at all costs mentality (Fortier et al., 2020). Violence in sport prevention efforts will need to consider how this dual role of parent and sport volunteer (coaches, managers, support staff) further complicates any potential initiatives- e.g. if the parent perpetuates the violence in sport but is also the coach, who should the child approach?

With regard to differences in individuals' experiences of IV in sport according to socio-demographic characteristics, our data highlights a gendered experience, both in terms of frequencies of violence and types of violence. Women experienced significantly higher rates of both psychological and sexual violence as a child than men. While the percentage difference between genders was only ~2% for each type of IV, data from studies outside the sporting context supports the notion that women and girls experience higher rates of sexual violence (Pereda et al., 2009; Stoltenborgh et al., 2011). In the sporting context, the data is less clear with some studies reporting that girls experience higher levels of sexual violence than boys (Vertommen et al., 2016) and others reporting the opposite (Bermon et al., 2021) or no difference (Parent et al., 2020a). These discrepancies can be due to a range of factors including the use of different measuring tools, disparate classifications and definitions of sexual violence, the established stigma and thus underreporting of sexual violence by boys and men and/or differences between countries. Another potential explanation for the discrepancies could be related to the #metoo movement (Caputi et al., 2019). This movement increased public awareness of sexual violence against women and men and could have, to some extent, reduced the stigma around anonymous reporting for both genders. Internet traffic around the topic (including how to report) increased following this movement so it is possible that it could have increased the likelihood of responses, to later surveys on the topic (Caputi et al., 2019). Furthering the issue of gender-based differences of IV in sport, in our study, women had significantly higher rates than men of peer psychological or physical violence, parental neglect or psychological violence and coach neglect, sexual harassment and sexual abuse with contact. In fact, there were no categories of IV where men reported higher rates of childhood violence than women. Additionally, while those who do not identify as either a man or a woman are often not

included in statistical analyses due to relatively low sample sizes, their inclusion within our analyses highlighted that they experience significantly higher rates of IV from coaches (psychological, physical and sexual harassment), peers (sexual harassment and physical) and even parents (physical), when compared to men and women combined. To our knowledge, this study is the first to report the childhood prevalence rates of psychological, physical and sexual violence in sport for gender diverse people. It is possible that the high rates we present are, in part, due to our convenience sampling, but it is also plausible that these individuals, being of a gender minority, could experience significantly higher rates of IV, as has been shown in other contexts outside of sport (Witcomb et al., 2019). These findings need to be confirmed in a larger representative sample of the Australian population.

In terms of risk factors predicting experiences of IV, we found that gender (woman), younger age, non-heterosexual orientation as well as a current disability were associated with a higher likelihood of experiencing one or more types of IV in sport as a child. While women had significantly higher rates of various types of IV than men, gender was not a significant risk factor for most types of IV. However, women were almost twice as likely to experience neglect during childhood compared to men. This finding further supports the need to classify violence as precisely as possible in order to accurately capture the nuances of sex-based and/or gendered violence. Younger age at the time of survey completion was associated with higher likelihood of reporting psychological or physical violence and this aligns with the findings of the retrospective study conducted by Vertommen et al. (2016). Given our study was also a retrospective one, and respondents reported their current age, the significance of age as a predictor shows that IV is more prevalent in younger respondents, which suggests that the experience of IV in sport is a current issue. Younger adults being more likely to

experience violence, could also be reflective of a memory bias whereby older respondents potentially remember less about their past experiences, though this bias could be reduced in our sample due to the explicit and specific nature of the types of violence presented (Hardt et al., 2004). Non-heterosexual individuals were twice as likely to experience sexual violence as a child in community sport. This finding aligns with previous work indicating members of the lesbian, gay and bisexual community are more likely to experience violence as a child either within or outside of sport (Balsam et al., 2005; Vertommen et al., 2016). Individuals with disability were twice as likely to experience psychological violence. Other studies have similarly found that people with disability had higher rates of not only psychological violence (Parent et al., 2020b) but also physical and sexual violence (Vertommen et al., 2016). Indeed, research shows that disability is an established risk factor for violence (in children and adults) both within and outside the sporting context (Hughes et al., 2012; Jones et al., 2012; Vertommen et al., 2016).

This study also shows the association of sport specific factors with experiences of violence. We found that hours of practice per week, and team based sport were both associated with a higher likelihood of experiencing one or more types of IV. For every 1-hour increase in sport participation, there was a 7% increase in the risk of experiencing any of the three forms of IV. This was also a finding in Parent et al. (2020b), which could be explained by the simple fact that the more hours that children participate in sport in each week, the more they are exposed to the sport environment and the higher their risk is of experiencing some form of IV. In addition, increasing the number of hours of training per week could be an indication that children are specializing in one sport to increasingly focus on performance development, and studies have shown that higher level of performance can increase the risk of experiencing IV

(Vertommen et al., 2016). The finding of team based sport being a risk factor for physical violence mirrors the findings of Parent et al. (2020b), but should be investigated further in future studies as it is not entirely clear why it would be a risk factor for physical violence and not the other forms.

Limitations

While the VTAQ tool is a validated tool, it has not yet been validated for use in English (Parent et al., 2020a) nor has it been implemented retrospectively, though the authors suggested this was a potential option for future implementations of the tool (Parent et al., 2019). The convenience sampling technique creates a self-selection sample bias, potentially attracting those individuals who may be more likely to report experiences of violence. Efforts were made with initial advertisements to attract all members of the public with general, non-specific language, requesting participants to report on their “experiences in sport”. However, due to ethical considerations of the study, the consent form on the landing page of the survey did explicitly state the survey would ask about experiences of violence in sport. Our sample also comprised an over-representation of women (63.3%), which limits the generalizability of the findings. Respondents were also only able to indicate if they had a current disability and their current sexual orientation. They could not further qualify the time of disability onset (at birth or acquired later in life) nor their childhood sexual orientation. Therefore, it is possible that some individuals who reported having a current disability could have been able-bodied during childhood and some individuals could have had a different sexual orientation during childhood. Similarly, the current data does not allow us to draw conclusions with regard to when (at what age) or where (in what sport) a specific instance of violence occurred. Rather, the focus is on gathering broad information on total experiences of violence during all of childhood. A final limitation we note is the

relatively small sample size of individuals identifying as gender diverse (n=17). The inclusion of these responses within the broader study is an important step forward, but we acknowledge that the small sample limits the generalizability of the findings. Most of these limitations can be addressed through conducting survey research with a representative sample of the population, which is a critical next step in understanding the prevalence of violence against children in Australian sport.

Implications and Conclusion

The results of this study highlight some key considerations for researchers, sport stakeholders and policy makers. Many respondents reported experiences of IV in sport, with a third experiencing all three different forms of violence. The diversity in the types of violence experiences highlights the importance of measuring and reporting on various categories of violence. In order to have comparative data both nationally for longitudinal studies and internationally to further our global understanding of violence in sport, the use of the same validated tools is critical. Additionally, special consideration should be given to the inclusion and indeed direct recruitment of individuals from minority groups (inclusive of those from gender, ethnic and sexual minorities as well as those with a disability), as these individuals are more likely to experience violence in sport. It is critical for future research to replicate this study in a representative sample of the population, and to implement prevalence studies longitudinally so that the interconnectedness of violence types can be examined.

For policy and practice, this study demonstrates that, like other social institutions, e.g. family, school and church, sport is not immune from the issue of violence towards children. Our findings offer a number of key considerations for policy in practice. First, the diversity in terms of both the type of violence and the perpetrator provides novel insights which can inform educational campaigns and assist in creating

more targeted interventions. For example, while peer psychological violence has been frequently highlighted in the literature, our novel findings of high rates of coach physical violence and parent psychological violence indicate that initiatives need likely include targeted education on appropriate behaviours for these stakeholders while also defining types of violence within the sporting context. While types of violence can be broadly defined, the inclusion of sport specific examples (e.g. coaches throwing clipboards, parents asking children to play while injured etc), will assist in combatting violent behaviours which are currently normalized within the sporting environment. Our study also suggests that it is important for prevention and response policies to take into consideration the gendered experience of IV, while also emphasizing that any child can experience IV. Regularly measuring the prevalence of violence against children in community sport will be an important way to evaluate the effectiveness of policy initiatives.

Interpersonal violence against children in Australian community sport is prevalent in all forms, is gendered and is perpetrated by peers, coaches and, to a lesser extent, parents. The media, policy makers and sport stakeholders can continue to play an important role in acknowledging, recognizing, responding to, and in preventing this problem so that the sporting environment is safe and nurturing for all children.

References

- Alexander, K., Stafford, A., & Lewis, R. (2011). The Experiences of Children Participating in Organised Sport in the UK. In. London: NSPCC.
- Allan, E. J. (2009). *Hazing in view: college students at risk: initial findings from the National Study of Student Hazing*: Diane Publishing.
- Australian Sports Commission. (2018). *AusPlay focus: Children's participation in organised physical activity outside of school hours*. Retrieved from https://www.sportaus.gov.au/_data/assets/pdf_file/0004/675562/AusPlay_focus_Children_Participation_2.pdf
- Baar, P., & Wubbels, T. (2011). Machiavellianism in Children in Dutch Elementary Schools and Sports Clubs: Prevalence and Stability According to Context, Sport Type, and Gender.

- Balsam, K. F., Rothblum, E. D., & Beauchaine, T. P. (2005). Victimization over the life span: a comparison of lesbian, gay, bisexual, and heterosexual siblings. *J Consult Clin Psychol*, 73(3), 477-487. doi:10.1037/0022-006x.73.3.477
- Bermon, S., Adami, P. E., Dahlström, Ö., Fagher, K., Hautala, J., Ek, A., . . . Timpka, T. (2021). Lifetime Prevalence of Verbal, Physical, and Sexual Abuses in Young Elite Athletics Athletes. *Frontiers in Sports and Active Living*, 3. doi:10.3389/fspor.2021.657624
- Bjornseth, I., & Szabo, A. (2018). Sexual Violence Against Children in Sports and Exercise: A Systematic Literature Review. *J Child Sex Abus*, 1-21. doi:10.1080/10538712.2018.1477222
- Brackenridge, C., & Fasting, K. (2002). Sexual harassment and abuse in sport: The research context. *Journal of Sexual Aggression*, 8(2), 3-15. doi:10.1080/13552600208413336
- Caputi, T. L., Nobles, A. L., & Ayers, J. W. (2019). Internet searches for sexual harassment and assault, reporting, and training since the #MeToo movement. *JAMA internal medicine*, 179(2), 258-259.
- Chroni, S., & Fasting, K. (2009). Prevalence of Male sexual harassment among female sports participants in Greece. *Inquiries Sport Phys Educ*, 7, 288-296.
- Corbière, M., & Fraccaroli, F. (2014). La conception, la validation, la traduction et l'adaptation transculturelle d'outils de mesure: des exemples en santé mentale et travail. In N. Larivière & M. Corbière (Eds.), *Méthodes qualitatives, quantitatives et mixtes : dans la recherche en sciences humaines, sociales et de la santé*: Presses de l'Université du Québec.
- Eime, R., Young, J. A., Harvey, J. T., Charity, M. J., & Payne, W. R. (2013). A systematic review of the psychological and social benefits of participation in sport for children and adolescents: informing development of a conceptual model of health through sport. *International Journal of Behavioral Nutrition and Physical Activity*, 10(1), 98. doi:10.1186/1479-5868-10-98
- Evans, B., Adler, A., Macdonald, D., & Cote, J. (2016). Bullying Victimization and Perpetration Among Adolescent Sport Teammates. *Pediatr Exerc Sci*, 28(2), 296-303. doi:10.1123/pes.2015-0088
- Fasting, K., Brackenridge, C., & Sundgot-Borgen, J. (2003). Experiences of Sexual Harassment and Abuse among Norwegian Elite Female Athletes and Nonathletes. *Research Quarterly for Exercise and Sport*, 74(1), 84-97. doi:10.1080/02701367.2003.10609067
- Fasting, K., Chroni, S., Hervik, S. E., & Knorre, N. (2010). Sexual harassment in sport toward females in three European countries. *International Review for the Sociology of Sport*, 46(1), 76-89. doi:10.1177/1012690210376295
- Fields, S. K., Collins, C. L., & Comstock, R. D. (2010). Violence in youth sports: hazing, brawling and foul play. *Br J Sports Med*, 44(1), 32-37. doi:10.1136/bjism.2009.068320
- Fortier, K., Parent, S., & Flynn, C. (2020). "You have 60 minutes to do what you can't do in real life. You can be violent": young athletes' perceptions of violence in sport. *European Journal for Sport and Society*, 17(2), 147-161. doi:10.1080/16138171.2020.1737422
- Fournier, C., Parent, S., & Paradis, H. (2021). The relationship between psychological violence by coaches and conformity of young athletes to the sport ethic norms. *European Journal for Sport and Society*, 1-19. doi:10.1080/16138171.2021.1878436

- Gendron, M., Frenette, É., Debarbieux, É., & Bodin, D. (2011). Comportements d'intimidation et de violence dans le soccer amateur au Québec: La situation des joueurs et des joueuses de 12 à 17 ans inscrits dans un programme sport-études [Bullying and violence behaviors in Quebec amateur soccer/football: the situation of players of 12 to 17 years old in a schoolsport program]. *International Journal on Violence and Schools, 12*, 90-111.
- Hahn, J. W., McCormick, M. C., Silverman, J. G., Robinson, E. B., & Koenen, K. C. (2014). Examining the Impact of Disability Status on Intimate Partner Violence Victimization in a Population Sample. *Journal of Interpersonal Violence, 29*(17), 3063-3085. doi:10.1177/0886260514534527
- Hardt, J., & Rutter, M. (2004). Validity of adult retrospective reports of adverse childhood experiences: review of the evidence. *J Child Psychol Psychiatry, 45*(2), 260-273. doi:10.1111/j.1469-7610.2004.00218.x
- Hughes, K., Bellis, M. A., Jones, L., Wood, S., Bates, G., Eckley, L., . . . Officer, A. (2012). Prevalence and risk of violence against adults with disabilities: a systematic review and meta-analysis of observational studies. *The Lancet, 379*(9826), 1621-1629. doi:10.1016/S0140-6736(11)61851-5
- Jeckell, A. S., Copenhaver, E. A., & Diamond, A. B. (2018). The spectrum of hazing and peer sexual abuse in sports: A current perspective. *Sports Health, 10*(6), 558-564.
- Johansson, S., Kenttä, G., & Andersen, M. B. (2016). Desires and taboos: Sexual relationships between coaches and athletes. *International Journal of Sports Science & Coaching, 11*(4), 589-598. doi:10.1177/1747954116654777
- Jones, L., Bellis, M. A., Wood, S., Hughes, K., McCoy, E., Eckley, L., . . . Officer, A. (2012). Prevalence and risk of violence against children with disabilities: a systematic review and meta-analysis of observational studies. *The Lancet, 380*(9845), 899-907. doi:[https://doi.org/10.1016/S0140-6736\(12\)60692-8](https://doi.org/10.1016/S0140-6736(12)60692-8)
- Krug, E. G., Mercy, J. A., Dahlberg, L. L., & Zwi, A. B. (2002). The world report on violence and health. *Lancet, 360*(9339), 1083-1088. doi:10.1016/s0140-6736(02)11133-0
- Leahy, T., Pretty, G., & Tenenbaum, G. (2002). Prevalence of sexual abuse in organised competitive sport in Australia. *Journal of Sexual Aggression, 8*(2), 16-36. doi:10.1080/13552600208413337
- McPherson, L., Atkins, P., Cameron, N., Long, M., Nicholson, M., & Morris, M. E. (2015). Children's Experience of Sport: What Do We Really Know? *Australian Social Work, 69*(3), 348-359. doi:10.1080/0312407x.2015.1055508
- Mountjoy, M., Brackenridge, C., Arrington, M., Blauwet, C., Carska-Sheppard, A., Fasting, K., . . . Budgett, R. (2016). International Olympic Committee consensus statement: harassment and abuse (non-accidental violence) in sport. *Br J Sports Med, 50*(17), 1019-1029. doi:10.1136/bjsports-2016-096121
- Parent, S., & Fortier, K. (2017). Prevalence of interpersonal violence against athletes in the sport context. *Curr Opin Psychol, 16*, 165-169. doi:10.1016/j.copsyc.2017.05.012
- Parent, S., & Fortier, K. (2018). Comprehensive Overview of the Problem of Violence Against Athletes in Sport. *Journal of Sport and Social Issues, 42*(4), 227-246. doi:10.1177/0193723518759448
- Parent, S., Fortier, K., Vaillancourt-Morel, M.-P., Lessard, G., Goulet, C., Demers, G., . . . Hartill, M. (2019). Development and initial factor validation of the Violence Toward Athletes Questionnaire (VTAQ) in a sample of young athletes. *Loisir et*

- Société / Society and Leisure*, 42(3), 471-486.
doi:10.1080/07053436.2019.1682262
- Parent, S., Gillard, A., Hébert, M., & Woodburn, A. (2020a). English translation of the Violence Toward Athletes Questionnaire (VTAQ) [manuscript in preparation]. *Université Laval*.
- Parent, S., Lavoie, F., Thibodeau, M. E., Hebert, M., Blais, M., & Team, P. A. J. (2016). Sexual Violence Experienced in the Sport Context by a Representative Sample of Quebec Adolescents. *J Interpers Violence*, 31(16), 2666-2686.
doi:10.1177/0886260515580366
- Parent, S., & Vaillancourt-Morel, M.-P. (2020b). Magnitude and Risk Factors for Interpersonal Violence Experienced by Canadian Teenagers in the Sport Context. *Journal of Sport and Social Issues*, 0193723520973571.
doi:10.1177/0193723520973571
- Pereda, N., Guilera, G., Forns, M., & Gómez-Benito, J. (2009). The prevalence of child sexual abuse in community and student samples: A meta-analysis. *Clinical Psychology Review*, 29(4), 328-338.
doi:<https://doi.org/10.1016/j.cpr.2009.02.007>
- Rintaugu, E. G., Kamau, J., Amusa, L., & Toriola, A. (2014). The forbidden acts: prevalence of sexual harassment among university female athletes. *African Journal for Physical Health Education, Recreation and Dance*, 20(3), 974-990.
- Sport Australia. (2021). Ausplay: a focus on volunteering in sport. . Retrieved from https://www.clearinghouseforsport.gov.au/data/assets/pdf_file/0004/1029487/AusPlay-Volunteering-in-Sport.pdf
- Sport Integrity Australia. (2021). *2021-2025 Corporate Plan: Protecting Sport Together*. Retrieved from https://www.sportintegrity.gov.au/sites/default/files/COR001-0821%20CORPORATE%20PLAN_WEB4.pdf
- Stoltenborgh, M., van Ijzendoorn, M. H., Euser, E. M., & Bakermans-Kranenburg, M. J. (2011). A Global Perspective on Child Sexual Abuse: Meta-Analysis of Prevalence Around the World. *Child Maltreatment*, 16(2), 79-101.
doi:10.1177/1077559511403920
- Vertommen, T., Decuyper, M., Parent, S., & Paradis, H. (2021). Validation of the Dutch (Flemish) version of the Violence Towards Athletes Questionnaire (VTAQ). *Sport and Leisure (accepted)*.
- Vertommen, T., Kampen, J., Schipper-van Veldhoven, N., Uzieblo, K., & Van Den Eede, F. (2018). Severe interpersonal violence against children in sport: Associated mental health problems and quality of life in adulthood. *Child Abuse & Neglect*, 76, 459-468. doi:<https://doi.org/10.1016/j.chiabu.2017.12.013>
- Vertommen, T., Kampen, J., Schipper-van Veldhoven, N., Wouters, K., Uzieblo, K., & Van Den Eede, F. (2017). Profiling perpetrators of interpersonal violence against children in sport based on a victim survey. *Child Abuse Negl*, 63, 172-182.
doi:10.1016/j.chiabu.2016.11.029
- Vertommen, T., Schipper-van Veldhoven, N., Wouters, K., Kampen, J. K., Brackenridge, C. H., Rhind, D. J. A., . . . Van Den Eede, F. (2016). Interpersonal violence against children in sport in the Netherlands and Belgium. *Child Abuse & Neglect*, 51, 223-236. doi:<https://doi.org/10.1016/j.chiabu.2015.10.006>
- Witcomb, G. L., Claes, L., Bouman, W. P., Nixon, E., Motmans, J., & Arcelus, J. (2019). Experiences and Psychological Wellbeing Outcomes Associated with Bullying in Treatment-Seeking Transgender and Gender-Diverse Youth. *LGBT Health*, 6(5), 216-226. doi:10.1089/lgbt.2018.0179

Footnotes

¹ In this article, the term “participant” is used to describe individuals who participate in grassroots organized community sport. The term “athlete” is used to describe individuals who compete at high-performance and elite levels.