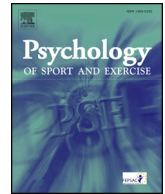




ELSEVIER

Contents lists available at ScienceDirect

## Psychology of Sport &amp; Exercise

journal homepage: [www.elsevier.com/locate/psychsport](http://www.elsevier.com/locate/psychsport)

## Parents' moral intentions towards antisocial parent behaviour: An identity approach in youth sport

Jordan T. Sutcliffe<sup>a,\*</sup>, Colin D. McLaren<sup>b</sup>, Alex J. Benson<sup>c</sup>, Luc J. Martin<sup>d</sup>, Steven Arnocky<sup>b</sup>, Chris Shields<sup>e</sup>, Barbi Law<sup>b</sup>, Travis E. Dorsch<sup>f</sup>, Mark W. Bruner<sup>b</sup>

<sup>a</sup> University of Wollongong, Australia

<sup>b</sup> Nipissing University, Canada

<sup>c</sup> Western University, Canada

<sup>d</sup> Queen's University, Canada

<sup>e</sup> Acadia University, Canada

<sup>f</sup> Utah State University, USA

## ARTICLE INFO

## Keywords:

Youth sport parents  
Personal identity  
Social identity  
Moral intentions  
Antisocial behaviour

## ABSTRACT

**Objectives:** Grounded in personal and social identity theory, the purpose of this study was to examine whether parents' personal and social identity perceptions influence their moral intentions towards antisocial parent behaviour in a youth sport setting.

**Design:** Parents of competitive youth ice hockey players ( $N = 437$ ) read a vignette that either described a parent from the participant's own team (i.e., ingroup), or a parent from an opposing team (i.e., outgroup) acting antisocially towards an athlete from the participant's own team, an opposing athlete, or their own child. Parents were asked whether they would respond to the antisocial behaviour in the form of direct or indirect criticism or report the behaviour to the coach or to the league.

**Results:** Parents were more likely to directly criticize ingroup parents than outgroup parents and they were more likely to indirectly criticize outgroup parents than ingroup parents. Further, parents with stronger social identities reported higher intentions to indirectly criticize an outgroup parent. There were no main effects for reporting behaviour (to coach or league), and personal identity did not moderate relationships with moral intentions towards antisocial behaviour.

**Conclusion:** By providing parents with a situation that includes antisocial parent behaviour in the immediate youth sport environment, novel insight was gathered with regard to what contextual elements might drive parents' intention to criticize, but not report antisocial behaviour.

Global reports involving children and adolescents reveal that approximately 50% participate in organized sport (Tremblay et al., 2016). This high prevalence is important because involvement in youth sport can foster positive developmental outcomes that span the physical, social, psychological, emotional, and intellectual domains (see Eime, Young, Harvey, Charity, & Payne, 2013). However, equally important is a smaller body of literature that highlights some of the negative consequences of participation in youth sport such as modelling inappropriate behaviour, increased fear and occurrence of injury, and hindered moral development (Fraser-Thomas, Côté, & Deakin, 2005). This range of qualitatively distinct outcomes indicates that mere participation in youth sport does not ensure positive development. As such, researchers have become interested in the contextual factors that underpin a positive youth sport experience, including the quality of

relationships youth athletes form with other social agents (Côté, Turnidge, & Evans, 2014).

Quality relationships refer to positive and meaningful interpersonal relationships with social agents in youth sport such as peers, coaches, and parents (Côté, Turnidge, & Evans, 2014). Among the social agents, coaches and peers have received considerable attention in the literature concerning their influence on young athletes, however, parents have received relatively less attention and thus research in this area has seen exponential growth in recent decades (Holt & Neely, 2012; Dorsch, Vierimaa, & Plucinik, 2019). Parents are a critical sport socialization agent for children and adolescents in sport as they are often invested from a fiduciary (e.g., transportation), monetary (e.g., sport equipment), and emotional perspective (Dorsch, Smith, & McDonough, 2009). Parents have been categorized as the supporters, providers, and

\* Corresponding author. University of Wollongong, Northfields Ave, Wollongong, 2522, Australia.

E-mail address: [js545@uowmail.edu.au](mailto:js545@uowmail.edu.au) (J.T. Sutcliffe).

<https://doi.org/10.1016/j.psychsport.2020.101699>

Received 5 December 2019; Received in revised form 16 March 2020; Accepted 18 March 2020

Available online 23 March 2020

1469-0292/ © 2020 Elsevier Ltd. All rights reserved.

administrators of their children's experiences, and their involvement also provides opportunities to nurture relationships and satisfy their responsibilities as an active parent (Coakley, 2006). Despite research evincing the range of roles that youth sport parents fulfill, the outcomes associated with parent involvement require further inquiry. Although parental disengagement from youth sport activities may be suboptimal for children's experiences, it is equally important to highlight that greater parental involvement does not necessarily coincide with more positive experiences for children, or the parents (Dorsch et al., 2009).

In general, the physical youth sport environment is a public area, and athletes are often directly exposed to immediate verbal and non-verbal feedback from parents (Fredricks & Eccles, 2005). Parents may intentionally—or unintentionally—communicate the goals they have for their children, the value they place on winning and effort, and their perceptions of their child's competence through different forms of behaviour (Dorsch, Smith, Wilson, & McDonough, 2015). Although sport organizations have dedicated significant resources to ensure that public viewing areas are safe spaces for parents and athletes (e.g., Hockey Canada Respect in Sport), we also know that negative behaviours continue to permeate within this context (Ross, Mallett, & Parkes, 2015).

Recent inquiry has reported parents verbally abusing officials and other parents, undermining coaches, highlighting their children's flaws, and providing support only when performance standards are met (Ross et al., 2015). As an example, Shields, Bredemeier, LaVoi, and Power (2005) reported that of 189 American youth sport parents, 14% reported being verbally aggressive toward an official, and 13% self-reported angrily criticizing their child's performance. Relatedly, Bowker et al. (2009) observed competitive youth ice hockey parents during competition and found that 33% of all comments were classified as negative. More recently, Dorsch et al. (2015) found that 12% of parents' sideline comments were categorized as negative, establishing that children are regularly subjected to adults engaging in negative interpersonal behaviours.

Researchers have also begun investigating factors that contribute to parent sideline behaviour such as parents' goals for their children's sport participation. Through qualitative interviews with youth sport parents, Dorsch et al. (2015) noted that relational (i.e., development and maintenance or relationships), instrumental (i.e., overcoming obstacles), and identity goals (i.e., portraying a desirable image of the self) appear to contribute to parent sideline behaviour. Pertinent to the current study, identity-related goals can be summarized as goals related to portraying a desired image of the self and significant others (e.g., a child). Therefore, factoring parent identity in terms of both personal and social identity may be a potential underlying reason for problematic parent behaviour (Dorsch et al., 2015).

Personal identity, guided by identity theory (Stets & Burke, 2000) represents assigned meanings to roles in specific contexts. Historically, empirical research has linked personal identification with behaviour in various contexts. In an organizational setting, occupational identities have implications for how one might dress for an interview or verbally address a senior employee (Haslam Postmes, & Ellemers, 2003). Sport and physical activity also represent important social contexts for studying identity and behaviour. In a physical activity context, research indicates that strength of exercise identity is strongly associated with an array of behavioural outcomes such as exercise frequency and general adherence (Evans, McLaren, Budziszewski, & Gilchrist, 2019). Further, those who identified more strongly as an athlete experienced higher levels of anger and aggressiveness compared to their lower identifying counterparts (Visek, Watson, Hurst, Maxwell, & Harris, 2010).

Alongside personal identity, the degree to which parents identify with a particular social group—their social identities—may help understand and explain problematic parent behaviour in youth sport. Social identification can have considerable implications regarding individual behaviour towards others (Tajfel, 1981). Notably, social identity is a salient predictor of moral behaviour in sport contexts.

Bruner, Boardley, and Côté (2014) found that high school athletes' perceptions of ingroup affect were positively associated with frequency of prosocial behaviour amongst teammates, whereas perceptions of ingroup ties were positively associated with antisocial behaviour directed to both teammates and opposing athletes. Extending this work, Bruner et al. (2018) found a potential maladaptive relation with moral behaviour towards opponents (i.e., outgroup members). For competitive youth ice hockey athletes, higher perceptions of cognitive centrality resulted in more frequent reports of antisocial behaviour towards opponents, which may be explained by a need to demonstrate and/or gain status amongst team members (Goldman, Giles, & Hogg, 2014). In addition, strong perceptions of cognitive centrality were positively associated with antisocial behaviour amongst teammates (Bruner et al., 2018). One potential explanation for this link is that teammates may act antisocially toward each other in highly competitive, performance-oriented environments due to the primacy of self-interests in competitive contexts (Wang et al., 2014). Therefore, theory and empirical linkages between identity and behaviour toward ingroup and outgroup members provide a compelling rationale to consider personal and social identity when attempting to better understand the antisocial behaviours that parents exhibit in youth sport contexts.

Within these sport contexts where antisocial parent behaviours typically occur, you can often find several other parents spectating their child. As such, these parent bystanders offer a unique approach to monitor parent behaviour, and therefore evaluating parents' intentions to intervene when witnessing another parent behave in an antisocial manner is a novel avenue of research in this respect. We operationalize parents' moral intentions as the intention to criticize and/or report antisocial behaviours enacted by other parents. We considered these intentions moral as they align with two processes that influence moral intention within the twelve-component model for moral action - 1) responsibility judgments and, 2) reaction formation as defending (Shields & Bredemeier, 1995). Further, we focused our efforts in a youth ice hockey context due to a long and continuous history of antisocial parent behaviour in this sport (Bean, Jeffery-Tosoni, Baker, & Fraser-Thomas, 2016). Indeed, although antisocial behaviours appear in many sports, the cultural significance of ice-hockey in Canada is a phenomenon that scholars and mainstream journalists have highlighted (Lorenz, 2015; Reuters, 2010). Moreover, because spectators from competing teams often sit in close proximity to one another during youth competitions, parents may witness unfamiliar (i.e., parents from an opposing team) or familiar parents (i.e., parents from their child's team) acting antisocially towards competing athletes (i.e., either an athlete on their child's team, an opposing team, or perhaps their own child). Therefore, exposure to these different situations through hypothetical vignettes offers a novel approach to understanding the behaviours exhibited by parents. In summary, using vignettes to explore parents' moral intentions when faced with a dilemma in a youth ice hockey context is an important avenue to investigate.

## 1. The current study

The purpose of the current study was to examine whether parents' personal and social identity perceptions influenced their moral intentions towards antisocial parent behaviour in a youth sport setting. Four hypotheses were examined. Our first hypothesis was grounded in research regarding ingroup favouritism and outgroup degradation (Castano, Yzerbyt, Paladino, & Sacchi, 2002). Specifically, we were interested in whether parents' moral intentions would differ based on the parent exhibiting the antisocial behaviour, and thus hypothesized that parents would be less likely to criticize another parent making negative comments about a child when they were from their own team (i.e., ingroup parent) than a parent from the opposing team (i.e., outgroup parent). Our second hypothesis stems from previous qualitative work demonstrating that sport parents were motivated to protect their children from potentially negative outcomes (Dorsch et al., 2009).

Thus, we were interested in whether parents' moral intentions would differ based on the athlete receiving the antisocial behaviour. We hypothesized that parents would be more likely to criticize a parent making negative comments about a child when it was their own child being insulted (i.e., own child) than a child on their team (i.e., ingroup child) or a child from another team (i.e., outgroup child). Additionally, those who read about a parent directing negative comments at a child from their team (i.e., ingroup child) would report significantly higher moral intentions towards antisocial parent behaviour than those who read about negative comments directed at a child from another team (i.e., outgroup child).

Our third hypothesis is grounded in identity theory (Stets & Burke, 2000), whereby the identity standard is in continuous comparison with perceived input and subsequently adjusted through output (i.e., outlets of behaviour). In terms of identity moderating the previously described relations, we were interested in whether parents' personal identity would moderate their moral intentions. We hypothesized that parents with stronger perceptions of personal identity would report significantly higher moral intentions in response to a parent from the same team (i.e., ingroup parent) acting antisocially, in comparison to low personal identifiers. Our fourth hypothesis was guided by ingroup favouritism research (Castano et al., 2002). Similar to personal identity, we were interested in whether parents' social identity would moderate their moral intentions. We hypothesized that parents with stronger perceptions of social identity would report higher moral intentions in response to a parent from another team acting antisocially, compared with their lower identifying counterparts.<sup>1</sup>

## 2. Method

To test our hypotheses, we used experimental vignettes whereby participants were asked to imagine themselves at the arena watching one of their children's regular season games. We created a realistic scenario in which a parent was insulting a child sport participant during the event. We manipulated the person who was engaging in the behaviour (i.e., ingroup parent vs. outgroup parent) and the target of the insult (i.e., own child, child who is a member of own team, child who is a member of the other team). In this way, we applied a 2 × 3 between-subjects experimental vignette design. The first level of our design pertained to the parent acting antisocially in the vignette (parent from the participants own team or an opposing team), whereas the second level pertained to the target of the antisocial behaviour (i.e., athlete from the participants own team, an opposing team, or the participants own child). Then, we explored whether perceptions of identity (i.e., personal and social) moderated the relations between study condition and moral intentions. All data collection plans (e.g., power analysis, recruitment strategy), hypotheses, and analyses were preregistered on the Open Science Framework (<https://osf.io/gcktf>). Within the Open Science Framework, we report how we determined our sample size, all data exclusions, all manipulations, and all measures in the study. Any deviations from the pre-registration are explicitly noted.<sup>2</sup>

### 2.1. Participants

We sought to recruit 508 participants based on an assumed effect size in the small-to-medium range for our focal tests related to moral intentions towards antisocial parent behaviour, desired power of 0.80,

<sup>1</sup> Our original preregistration included a fifth hypothesis (H5). However, in light of study developments, the details and results of H5 were purposefully omitted due to redundancy and lack of added strength to the study.

<sup>2</sup> Due to necessary wording modifications within study hypotheses, a second preregistration protocol was created. All components of the two registrations are identical with the exception of some minor modifications in the hypotheses due to a mistake in the original preregistration.

at an alpha of 0.05. To reach the desired sample, approximately 2000 parents were approached to participate in the study. Parents were approached either before or after their child's competition. After excluding participants based on the attention check ( $n = 83$ ), which is further described below, the final sample included 437 participants (201 females, 236 males;  $M_{age} = 43.53$  years,  $SD_{age} = 6.37$  years). Participants' children represented four levels of competitive ice hockey: atom (9–10 years of age,  $n = 61$ ), peewee (11–12 years of age,  $n = 207$ ), bantam (13–14 years of age,  $n = 144$ ), and midget (15–17 years of age,  $n = 25$ ). We operationalize participants' level of ice hockey as competitive for the reason that all tournaments involving data collection were held for representative teams in Canada or the United-States (e.g., A, AA, or AAA). For descriptive purposes, we collected information on whether parents played ice hockey in their youth (36% responded yes). Additionally, parents indicated whether they believed their child fit in the bottom (5% of parents), middle (29% of parents), or top third (66% of parents) with regard to perceived skill on their current team.

### 2.2. Procedure

After obtaining institutional ethical approval, we sought permission from the chairman of four weekend tournaments to set-up a research booth and invite parents to participate in a pen and paper study. Consenting participants read the letter of information and provided informed consent, all of which occurred at the arena. To randomize parents' assignment to the experimental conditions, six different versions of the questionnaire were interleaved and therefore distributed in random order.

### 2.3. Experimental vignettes

The vignettes included a hypothetical situation where a parent was acting antisocially towards a child at the arena. The scenarios were adapted from previous research (Kavussanu & Ring, 2016) and literature pertaining to parent sideline behaviour (Dorsch et al., 2015). Participants were randomly assigned to read one of six vignettes that varied as a function of the actor (i.e., the parent acting antisocially) and the target (i.e., the athlete to whom the behaviour was directed). The six conditions in this study were: 1) a parent on their *own* team acting antisocially towards a child on their *own* team ( $n = 82$ ), 2) a parent on their *own* team acting antisocially towards a child on the *opposing* team ( $n = 74$ ), 3) a parent on their *own* team acting antisocially towards their *own* child ( $n = 58$ ), 4) a parent on the *opposing* team acting antisocially towards a child on their *own* team ( $n = 89$ ), 5) a parent on the *opposing* team acting antisocially towards a child on the *opposing* team ( $n = 75$ ), and finally 6) a parent on the *opposing* team acting antisocially towards their *own* child ( $n = 59$ ).

In terms of context, the participants were asked to imagine themselves at the arena watching one of their children's regular season games. During the game, the reader observed another parent behaving antisocially towards an athlete. Specifically, the reader observed a parent saying, "Don't worry about this kid. He's pathetic, he's a fucking joke". Parents then completed measures to assess their moral intentions with regard to the scenario.

### 2.4. Measures

**Moral intentions.** Parents' moral intentions towards antisocial parent behaviour were measured through four single items immediately following the written vignette. Items of moral intention were adapted from previous work examining student athletes' moral thought and action in response to a moral dilemma (see Kavussanu & Ring, 2016). Items one and two asked parents how likely they were to confront and criticize the situation directly (e.g., how likely are you to directly criticize this parent – say something to their face?) and indirectly (e.g.,

how likely are you to criticize this parent indirectly – say something to another parent?). Items three and four asked parents the likelihood of them reporting the situation to their team's coach (e.g., how likely are you to report this type of behaviour to your team's coach?) or to the league (e.g., how likely are you to report this type of behaviour to the league/tournament?). All items were scored on a scale from 1 (*not at all likely*) to 7 (*extremely likely*).

Participants also responded to three dichotomous questions assessing their previous experiences with the type of behaviour read in the vignette. The first question read "Have you ever experienced a parent from your team behave this way" (53% responded yes). In addition, parents were asked, "Have you ever personally engaged in any of the behaviour you read about on the previous page?" (14% responded yes) and "Is this something you would say to your own child?" (5% responded yes).

**Personal identity.** Parents' personal identity was assessed using a 9-item modified version of the Exercise Identity Scale (Anderson & Cychosz, 1994). This is a unidimensional measure of identity and has shown good factorial validity in adult samples ( $\alpha = 0.90$ ; Strachan, Brawley, Spink, Sweet, & Perras, 2015). The scale was modified to reflect the respondent's identification as an ice hockey parent. For example, the item "I have numerous goals related to exercising" was adapted to "I have numerous goals related to my child's involvement in hockey" ( $\alpha = 0.80$ ). Each item was scored from 1 (*strongly disagree*) to 7 (*strongly agree*).

**Social identity.** Parents' social identities were assessed using a sport-adapted version of Cameron (2004) 12-item measure of social identity. The sport version of the measure was modified to assess the strength with which parents socially identified with the team. For example, item 1 "I have a lot in common with other members in this team" was adapted to "I have a lot in common with other parents on my child's team" ( $\alpha = 0.90$ ). Each item was scored from 1 (*strongly disagree*) to 7 (*strongly agree*). The Social Identity Questionnaire can be used to assess three dimensions of social identity (i.e., ingroup ties, cognitive centrality, ingroup affect) or an overall score of social identity based on a mean of the 12 items (see supplementary file for exploratory, dimension-specific analyses).

**Attention check.** Parents were asked to identify the child target (i.e., ingroup, outgroup, or own-child) at the end of the questionnaire to assure they carefully read the vignette. Eighty-two participants were excluded from the final analysis for responding incorrectly to the attention check item.

## 2.5. Data analysis

After checking assumptions of normality, a sensitivity analysis was conducted to address any differences between the total sample ( $N = 519$ ) and the analytic sample ( $n = 437$ ). A factorial multivariate analysis of variance (MANOVA) was also used to determine whether there were significant differences in the dependent measures (i.e., one analysis for criticizing and a second for reporting behaviours) as a function of study condition.

Moderation models were conducted to examine whether identity strength moderated the relationship between the first factor of the experimental design (i.e., parent actor) and moral intentions towards antisocial parent behaviour. A *personal identity average* variable and *social identity average*<sup>3</sup> variable were computed to represent the overall strength of parents' personal and social identities. The effect of condition was included as a categorical predictor (i.e., ingroup parent = 0; outgroup parent = 1) and identity scores were included as a continuous

<sup>3</sup> We analyzed social identity as a unidimensional construct due to the lack of dimension-specific hypotheses. However, we also conducted exploratory analyses to evaluate whether the moderated multiple regression results differed as a function of the specific dimensions of social identity.

variable that was grand-mean centered. In the presence of significant interaction effect ( $p < .05$ ), we used the Johnson-Neyman technique<sup>4</sup> (Aiken, West, & Reno, 1991) to assess the range of identity scores within which the effect of condition was significant.

## 3. Results

### 3.1. Descriptive statistics

Descriptive statistics can be found in Table 1. Overall, means revealed that parents were more inclined to report intentions to indirectly criticize parents ( $M = 4.88, SD = 1.99$ ) compared with criticizing them directly ( $M = 3.66, SD = 2.14$ ),  $p < .001$ . Further, parents reported higher intentions to report antisocial parent behaviour to the coach ( $M = 3.69, SD = 2.23$ ) compared with reporting the antisocial behaviour to the league/tournament ( $M = 2.84, SD = 1.95$ ),  $p < .001$ . With regard to perceptions of identity, parents identified more strongly socially ( $M = 4.11, SD = 1.04$ ) compared to personally ( $M = 3.87, SD = 1.01$ ),  $p < .001$ .

### 3.2. Hypothesis 1: main effect of parent actor

We hypothesized that parents who read about a parent on their own team (i.e., ingroup parent) acting antisocially (i.e., conditions 1–3) would report lower moral intentions towards antisocial parent behaviour compared to those who read about a parent on the opposing team (i.e., outgroup parent) acting antisocially (i.e., conditions 4–6). We found support for our hypothesized direction of intentions to indirectly criticize. Indeed, there was a significant main effect of parent actor with regard to intentions to indirectly criticize antisocial parent behaviour,  $F(1, 429) = 15.23, p < .001, \eta_p^2 = .034$ , where parents reported higher intentions to indirectly criticize an outgroup parent ( $M = 5.25$ ) compared to an ingroup parent ( $M = 4.50$ ). Contrary to our hypothesized direction, there was a significant main effect for parents' intentions to directly criticize,  $F(1, 429) = 5.05, p = .03, \eta_p^2 = .012$ , where parents reported higher intentions to directly criticize an ingroup parent ( $M = 3.87$ ) compared to an outgroup parent ( $M = 3.46$ ). There were no significant effects regarding intentions to report the behaviour to the coach,  $F(1, 429) = 0.15, p = .70, \eta_p^2 < .001$ , or the tournament/league,  $F(1, 429) = 0.93, p = .34, \eta_p^2 = .002$ .

### 3.3. Hypothesis 2: main effect of child target

We hypothesized that parents who read about a parent behaving antisocially towards their child would report higher moral intentions towards antisocial parent behaviour compared to when directed to other children on their own team (i.e., ingroup athlete) and children on the other team (i.e., outgroup athlete). We did not find support for H2. There was no significant effect of child target with regard to direct criticism,  $F(2, 429) = 1.27, p = .28, \eta_p^2 = .006$ , or indirect criticism,  $F(2, 429) = 0.22, p = .80, \eta_p^2 = .001$ . Similarly, there was no significant effect of child target on reporting to the coach,  $F(2, 429) = 2.08, p = .13, \eta_p^2 = .010$ , or to the league/tournament,  $F(2, 429) = 1.43, p = .24, \eta_p^2 = .007$ .

### 3.4. Hypothesis 3: moderation of personal identity on parent actor

We hypothesized that parents with higher perceptions of personal identity would be more inclined to criticize and report parents on their own team (i.e., ingroup parent) compared to lower identifying parents.

<sup>4</sup> We originally preregistered that significant interaction effects would be decomposed using the pick a point method (i.e.,  $-1$  or  $+1$  SD). However, study developments during the analysis phase resulted in utilizing the Johnson-Neyman technique.

**Table 1**  
Descriptive statistics for dependent variables across conditions.

Experimental condition	Ingroup-Ingroup, <i>M (SD)</i>	Ingroup-Outgroup, <i>M (SD)</i>	Ingroup-Own child, <i>M (SD)</i>	Outgroup-Ingroup, <i>M (SD)</i>	Outgroup-Outgroup, <i>M (SD)</i>	Outgroup-Own child, <i>M (SD)</i>
Direct criticism	3.81 (2.25)	3.55 (1.94)*	4.36 (2.42)*	3.44 (2.07)*	3.44 (2.07)*	3.46 (2.18)*
Indirect criticism	4.52 (2.13)*	4.46 (1.82)*	4.52 (2.20)*	5.35 (1.74)**	5.12 (1.97)*	5.25 (1.95)*
Report to coach	4.02 (2.26)	3.47 (2.34)	3.64 (2.20)	3.91 (2.21)	3.67 (2.25)	3.31 (2.05)
Report to league	2.88 (1.96)	2.53 (1.74)*	2.81 (1.98)	3.18 (2.07)*	2.80 (1.99)	2.78 (1.95)

Note: Condition labels are separated by actor (first) and target (second). For example, participants in the first condition read a hypothetical vignette about a parent from their own team (i.e., ingroup) acting antisocially towards an athlete on their own team (i.e., ingroup).

\* $p < .05$ , \*\* $p < .01$

Support for H3 was not found. With regard to direct criticism, the model,  $F(3, 427) = 2.64, p = .05$ , and the effect of parent actor,  $B = -1.86, 95\% \text{ CI } [-3.46, -0.26]$ , were significant, yet the interaction was not,  $B = -0.38, 95\% \text{ CI } [-0.02, 0.78]$ . The model for indirect criticism was significant,  $F(3, 427) = 10.34, p < .001$ , however, no significant effect of parent actor,  $B = 0.05, 95\% \text{ CI } [-1.39, 1.50]$ , or interaction,  $B = 0.19, 95\% \text{ CI } [-0.17, 0.55]$ , was evident. Further, the model for reporting to the coach was not significant,  $F(3, 428) = 0.83, p = .48$ , nor was the effect of parent actor,  $B = -0.37, 95\% \text{ CI } [-2.05, 1.30]$ , or interaction,  $B = 0.09, 95\% \text{ CI } [-0.33, 0.51]$ . Similarly, the model for reporting to the league/tournament was not significant,  $F(3, 428) = 1.57, p = .20$ , nor was the effect of parent actor,  $B = -0.13, 95\% \text{ CI } [-1.59, 1.32]$ , or the interaction with personal identity,  $B = 0.09, 95\% \text{ CI } [-0.27, 0.46]$ .

**3.5. Hypothesis 4: moderation of social identity on parent actor**

We hypothesized that parents with higher perceptions of social identity would be more inclined to criticize and report parents on the other team (i.e., outgroup parent) compared to lower identifying parents. In line with H4, the model for indirect criticism was significant,  $F(3, 424) = 9.57, p < .001$ , however the effect of parent actor was not,  $B = -1.07, 95\% \text{ CI } [-2.56, 0.43]$ . Notably, the interaction revealed that the moderation effect was significant for social identity scores above 3.40,  $B = 0.49, p = .05, 95\% \text{ CI } [0.00, 0.89]$ , whereby parents above this threshold were more likely to indirectly criticize an outgroup parent (see Fig. 1). Our exploratory analyses with each specific dimension of social identity showed that ingroup affect and cognitive centrality (and not ingroup ties) moderated the effect of parent actor on moral intentions, revealing a similar pattern as the global dimension of social identity (see supplemental file).

Contrary to H4, the overall model for direct criticism was significant,  $F(3, 424) = 3.01, p = .03$ , however no significant effect of parent actor,  $B = -0.81, 95\% \text{ CI } [-2.45, 0.84]$ , or interaction,

$B = -0.09, 95\% \text{ CI } [-0.30, 0.48]$ , were evident. Furthermore, the model for reporting to the coach was significant,  $F(3, 425) = 2.85, p = .04$ , however the effect of parent actor,  $B = 0.32, 95\% \text{ CI } [-1.40, 2.03]$ , and the interaction,  $B = -0.09, 95\% \text{ CI } [-0.49, 0.31]$  were not. With regard to reporting to the league/tournament, no significance was found in the model,  $F(3, 425) = 1.41, p = .24$ , effect of parent actor,  $B = -0.59, 95\% \text{ CI } [-2.09, 0.91]$ , or interaction,  $B = 0.20, 95\% \text{ CI } [-0.16, 0.55]$ .

**4. Discussion**

The purpose of this study was to examine whether parents' personal and social identity perceptions influenced their moral intentions towards antisocial parent behaviour in a youth sport setting. Drawing on literature pertaining to personal and social identity, we hypothesized that parents would report different moral intentions in response to observed antisocial behaviour from ingroup parents compared with outgroup parents (H1). In addition, it was hypothesized that parents would report different intentions based on whether the antisocial behaviour was directed at a child on their own team, a child on the opposing team, or their own child (H2). Partial support was found for H1, such that parents reported higher moral intention to directly criticize antisocial ingroup parent behaviour but also reported higher moral intention to indirectly criticize antisocial outgroup parent behaviour. No support was found for H2, suggesting that participants were indifferent with regard to who parents target with their antisocial verbal behaviour.

It was hypothesized that parents' personal (H3) and social identity (H4) strength would moderate the relations between study conditions and moral intentions. H3 was unsupported, whereby the strength in which one identifies as an ice hockey parent did not moderate moral intentions towards antisocial parent behaviour. In contrast, the strength with which parent participants identified as a member of their child's sport team (i.e., social identity) moderated indirect criticism towards

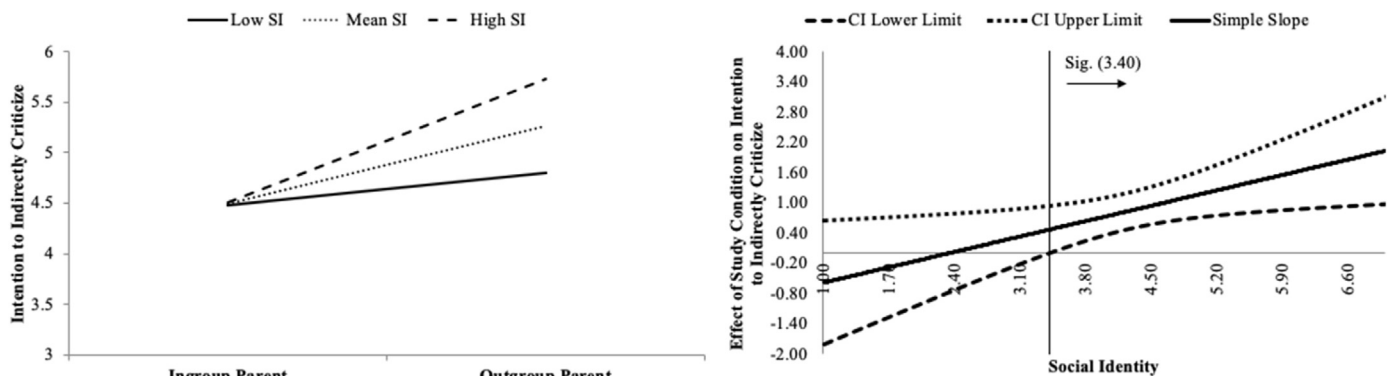


Fig. 1. Standardized (a) conditional moderation effect of Social Identity (SI) scores on intention to indirectly criticize antisocial parent behaviour, and Johnson-Neyman confidence limits (b).

outgroup parent behaviour, thus partially supporting H4. The findings illustrate that social identity and ingroup favouritism may play a part in parents' intentions to criticize antisocial parent behaviour in the youth sport environment.

Whether parents read about an ingroup or outgroup parent acting antisocially was impactful with regard to the intent to criticize that behaviour (H1). In support of this hypothesis, parents were more likely to report that they would intend to indirectly criticize parents from the opposing team (i.e., discuss the moral dilemma with another parent). Interestingly, parents reported that they would be more likely to directly criticize a parent on their own team (i.e., say something to the parent's face). As such, the findings suggest there are differences in moral intention towards ingroup and outgroup parents. Speculatively, it may require a certain profile of personality traits to willingly engage in direct interpersonal conflict with an unfamiliar individual (e.g., outgroup parent). In fact, personality has been extensively linked with personal, interpersonal, and social behaviour (Funder & Fast, 2010). Therefore, a specific personality type (e.g., high in trait neuroticism and extraversion) may be needed to confidently criticize an unfamiliar adult directly. Nonetheless, future research may consider controlling for personality differences when assessing intentions of morality.

Whether parents read about an antisocial behaviour directed at a child on their own team, a child on the opposing team, or their own child seemed to have no effect on parents' intentions to criticize or report the antisocial parent behaviour (H2). In an effort to better understand parent's cautiousness of reporting antisocial behaviours directed at their child, one may look to Rest (1984) four-step model of moral action. The four steps of the model include: 1) interpreting the situation and understanding how one's actions will affect others involved, 2) formulating the moral ideal in the specific situation (i.e., what ought to be done), 3) deciding to pursue the moral ideal by selecting among competing values, and 4) implementing a course of moral action (Rest, 1984). In line with the third step in the model, parents may have competing values with regard to their child's development or success as an ice hockey player. Here, parents may refrain from intervening antisocial behaviour directed at their child as it may cause distress between them and other social agents (e.g., peers and coaches).

The absence of reporting behaviour demonstrated by parents in the current study is noteworthy. Although certain situations elicited parents to report intentions to directly or indirectly criticize antisocial parent behaviour, reporting such behaviour did not emerge across any study condition. As such, parents may have cognitively reconstructed the antisocial behaviour into a benign and harmless act, as antisocial behaviour of this sort has become normalized in Canadian minor ice hockey culture. As noted, 53% of parents in this study reported experiencing a parent from their own team acting antisocially as was exemplified in the vignette. Further, 14% reported personally engaging in this behaviour, and 5% reported that they would act this way toward their own child. According to Bandura (2002) social cognitive theory of moral thought and action, moral disengagement refers to a set of eight self-regulatory mechanisms that allows individuals to disengage and validate antisocial behaviour (Bandura, 2002; Boardley & Kavussanu, 2009).

Related to the findings, one applicable moral disengagement mechanism is moral justification, which refers to the reconstruction of the behaviour itself into a socially accepted act (Bandura, 2002). In sport, parents may normalize antisocial behaviour in the crowd and reconstruct the negative comments as facilitative (i.e., moral justification). Another potentially relevant mechanism is euphemistic labelling, which involves using selective language in an attempt to frame unacceptable acts as less damaging (Bandura, 2002). For example, parents may label antisocial verbal comments as 'part of the game' or 'trash-talking' when in fact the comments are inappropriate. Further, distortion of consequences refers to the dismissal of negative outcomes caused by poor behaviour (Bandura, 2002). In a youth sport context,

parents may assume that athletes do not hear or acknowledge negative parental feedback during competition, and therefore dismiss the adverse effects. Perhaps the same mechanisms apply to competitive youth sport parents who disengage with the responsibility of reporting antisocial behaviour directed at young athletes.

Moral emotions may have played a role in parents' reluctance to criticize and report antisocial behaviour. Moral emotions serve as a mechanism by which group behaviours are judged and accepted (Dasborough, Hannah, & Zhu, 2019). In effect, group members experience different emotions based on the anticipation or observation of behaviours that range in ethicality (Dasborough et al., 2019). For example, feelings of guilt often act as a catalyst for prosocial behaviours when a moral standard is violated (Tangney, Stuewig, & Mashek, 2007). In contrast, feelings of shame and embarrassment, which are also reactive to substandard behaviours, are less proactive and often transgress into social withdrawal to avoid any further negativity (Haidt, 2003). As such, parents in the current study may have experienced shame and embarrassment rather than guilt when faced with the antisocial parent dilemma, and therefore failed in their intentions to do the "right thing." Interested researchers may consider extending this work by exploring parents' emotions in response to engaged and observed antisocial behaviours.

Grounded in the extensive research on ingroup favouritism (Castano et al., 2002), it was hypothesized that parents with stronger perceptions of social identity would criticize and report parents from the opposing team more so than parents from their own team. Parents' social identity tied to their child's ice hockey team ( $M = 4.11$ ) was relatively low compared to previous work measuring group identification in health and organizational settings (e.g., Haslam et al., 2017). Nonetheless, social identity was significantly related with direct criticism ( $p = .04$ ), indirect criticism ( $p = .02$ ), and reporting to the coach ( $p = .004$ ), which extends previous research with athletes in youth sport that suggests a relationship between social identity and moral behaviour (Bruner et al., 2014; Bruner et al., 2018). With regard to the hypothesized relationship, specifically, parents who strongly identified with the group were more likely to share their distaste of an opposing parent's behaviour with a parental ally through indirect criticism. Interestingly, these findings extend previous work in the sport-fan literature. Indeed, Wann and Branscombe (1995) found that college students with strong social identities (i.e., in relation to the college basketball team) were more inclined to diminish outgroup members compared to students with low social identity. Thus, the social identities that youth sport parents develop may be similar to that of sport fans, both of which relate with ingroup favouritism.

#### 4.1. Limitations and future directions

Despite the contributions made by this study, it is important to acknowledge its limitations in the context of the findings. The first limitation lies within the context from which participants were sampled. Participants were parents of male youth ice hockey players, and therefore generalizations to female or recreational contexts should be made with caution. Furthermore, the hypothetical situation presented to parents was focused on parent sideline behaviour, however, parent behaviour and communication is not limited to public settings and may often occur in more private contexts such as at home or during transportation to and from sport (Tamminen, Poucher, & Povilaitis, 2017). As such, future research may consider focusing on less explored contexts within which parents and athletes interact. This could be addressed by using naturalistic observation (e.g., Electronically Activated Recorder; see Herbison, Benson, Martin, & Bruner, 2017), which in turn may lead to greater ecological understanding of parent-child interactions in real time and how such interactions relate to moral behaviour. Additionally, several parents were excluded from the analytic sample due to their responses to the manipulation check. Notably, significantly more parents were excluded when provided with conditions that

included antisocial behaviour directed at their own children, therefore there may have been some ambiguity between “*child on my own team*” and “*my own child*” when completing the attention check. Failure of the attention check may have also been due to the fast-paced environment in which the research was conducted (i.e., before/after competition at the arena). Lastly, the current study assessed parents’ moral intentions, and therefore the findings may not align precisely with parents’ actual behaviour.

There are several potential avenues for future researchers to consider when assessing youth sport parent behaviour. For example, controlling for mechanisms of moral disengagement (e.g., euphemistic labeling) may provide novel insight regarding how parents validate poor behaviour conveyed by themselves and other surrounding parents. Moreover, previous research has highlighted sex differences with regard to parents’ verbal behaviour in youth sport (Bowker et al., 2009). The current study found preliminary evidence that males were more inclined to directly criticize antisocial parent behaviour compared to females ( $p = .048$ ), thus future work may consider examining sex as a moderator for parent morality in sport.

#### 4.2. Potential implications

From a theoretical perspective, the current study provides novel insight with regard to parents’ social identity and moral intentions in youth sport, as it is the first attempt to understand parents’ behavioural intentions using an identity theory approach (i.e., personal and social identity). In addition, the findings in the current study provide indication that parents develop group identities tied to their child’s sport team. As such, there may be value in further evaluation of current measures of parental social identity in sport.

The current findings also raise important practical implications for social agents (e.g., parents and coaches) to consider in youth sport. Specifically, the scenarios and outcome variables used in the current study relate to the content presented to parents in the *Respect in Sport* (2014) online program. ‘Respect in Sport’ is a 1-h online curriculum created to educate parents on healthy involvement in youth sport (*Respect in Sport*, 2014). Within the program, parents are provided recommended steps to engage in when a parent is acting inappropriately in the crowd. Parents are instructed to politely address the other parent’s poor behaviour, then report it to the coach or a higher authority if the behaviour persists. Since the program’s commencement, Hockey Canada has enforced one parent per household to take the course in order for their child to participate in minor ice hockey. As parents in the current study rarely directly criticized or reported poor behaviour, this raises questions with regard to the effectiveness of ‘Respect in Sport’. Our findings provide preliminary evidence for the need of more effective behavioural interventions for youth ice hockey parents. Indeed, a failure in this respect can have pernicious implications for athlete wellbeing and parent-child relationships. Therefore, further evaluative research into the efficacy of these types of programs to create awareness and behaviour change is warranted.

#### 4.3. Conclusion

Drawing from research pertaining to identity and morality in sport, the current study explored whether personal and social identity perceptions would influence parents’ moral intentions towards antisocial parent behaviour in youth sport. By providing parents with a situation that includes antisocial parent behaviour in the immediate youth sport environment, novel insight was gathered with regard to what contextual elements may drive parents’ intention to criticize, but not report antisocial behaviour. Overall, parents must be aware of the potential adverse effects their behaviour has on young athletes, and in turn, understand their role to address and report others’ poor behaviour. Future research through the lens of identity has the potential to foster a

greater understanding of parent behaviour in youth sport.

#### CRediT authorship contribution statement

**Jordan T. Sutcliffe:** Conceptualization, Methodology, Formal analysis, Investigation, Writing - original draft, Writing - review & editing. **Colin D. McLaren:** Conceptualization, Supervision, Methodology, Formal analysis, Writing - original draft, Writing - review & editing. **Alex J. Benson:** Conceptualization, Supervision, Methodology, Formal analysis, Writing - original draft, Writing - review & editing. **Luc J. Martin:** Conceptualization, Supervision, Methodology, Writing - original draft, Writing - review & editing. **Steven Arnocky:** Conceptualization, Supervision, Methodology, Formal analysis, Writing - original draft, Writing - review & editing. **Chris Shields:** Conceptualization, Supervision, Methodology, Writing - original draft, Writing - review & editing. **Barbi Law:** Conceptualization, Supervision, Methodology, Writing - original draft, Writing - review & editing. **Travis E. Dorsch:** Supervision, Methodology, Writing - original draft, Writing - review & editing. **Mark W. Bruner:** Conceptualization, Supervision, Methodology, Formal analysis, Writing - original draft, Writing - review & editing.

#### Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

#### Acknowledgements

This research was supported by the Social Sciences and Humanities Research Council of Canada (Grant number 435-2016-0591).

#### Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.psychsport.2020.101699>.

#### References

- Aiken, L. S., West, S. G., & Reno, R. R. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, California: Sage.
- Anderson, D. F., & Cychosz, C. M. (1994). Development of an exercise identity scale. *Perceptual & Motor Skills*, 78, 747–751. <https://doi.org/10.1177/003151259407800313>.
- Bandura, A. (2002). Selective moral disengagement in the exercise of moral agency. *Journal of Moral Education*, 31, 101–119. <https://doi.org/10.1080/0305724022014322>.
- Bean, C. N., Jeffery-Tosoni, S., Baker, J., & Fraser-Thomas, J. (2016). Negative parental behaviour in Canadian youth hockey: Expert insiders’ perceptions and recommendations. *Revue phénEPS/PHENex Journal*, 7, 46–67.
- Boardley, I. D., & Kavussanu, M. (2009). The influence of social variables and moral disengagement on prosocial and antisocial behaviours in field hockey and netball. *Journal of Sports Sciences*, 27, 843–854. <https://doi.org/10.1080/02640410902887283>.
- Bowker, A., Boekhoven, B., Nolan, A., Bauhaus, S., Glover, P., Powell, T., & Taylor, S. (2009). Naturalistic observations of spectator behavior at youth hockey games. *The Sport Psychologist*, 23, 301–316. <https://doi.org/10.1123/tsp.23.3.301>.
- Bruner, M. W., Boardley, I. D., Benson, A. J., Wilson, K. S., Root, Z., Turnnidge, J., Sutcliffe, J., & Côté, J. (2018). Disentangling the relations between social identity and prosocial and antisocial behavior in competitive youth sport. *Journal of Youth and Adolescence*, 47, 1113–1127. <https://doi.org/10.1007/s10964-017-0769-2>.
- Bruner, M. W., Boardley, I. D., & Côté, J. (2014). Social identity and prosocial and antisocial behavior in youth sport. *Psychology of Sport and Exercise*, 15, 56–64. <https://doi.org/10.1016/j.psychsport.2013.09.003>.
- Cameron, J. E. (2004). A three-factor model of social identity. *Self and Identity*, 3, 239–262. <https://doi.org/10.1080/13576500440000047>.
- Castano, E., Yzerbyt, V., Paladino, M. P., & Sacchi, S. (2002). I belong, therefore, I exist: Ingroup identification, ingroup entitativity, and ingroup bias. *Personality and Social Psychology Bulletin*, 28, 135–143. <https://doi.org/10.1177/0146167202282001>.
- Coakley, J. (2006). The good father: Parental expectations and youth sports. *Leisure Studies*, 25, 153–163. <https://doi.org/10.1080/02614360500467735>.
- Côté, J., Turnnidge, J., & Evans, M. B. (2014). The dynamic process of development

- through sport. *Kinesiology Slovenica*, 20, 14–26.
- Dasborough, M. T., Hannah, S. T., & Zhu, W. (2019). The generation and function of moral emotions in teams: An integrative review. *Journal of Applied Psychology*. <https://doi.org/10.1037/apl0000443> Advance online publication.
- Dorsch, T. E., Smith, A. L., & McDonough, M. H. (2009). Parents' perceptions of child-to-parent socialization in organized youth sport. *Journal of Sport & Exercise Psychology*, 31, 444–468. <https://doi.org/10.1123/jsep.31.4.444>.
- Dorsch, T. E., Smith, A. L., Wilson, S. R., & McDonough, M. H. (2015). Parent goals and verbal sideline behavior in organized youth sport. *Sport, Exercise, and Performance Psychology*, 8, 19–35. <https://doi.org/10.1037/spy0000025>.
- Dorsch, T. E., Vierimaa, M., & Pluciniuk, J. M. (2019). A citation network analysis of research on parent–child interactions in youth sport. *Sport, Exercise, and Performance Psychology*, 8, 145–162. <https://doi.org/10.1037/spy0000140>.
- Eime, R. M., 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, 98–118. <https://doi.org/10.1186/1479-5868-10-98>.
- Evans, M. B., McLaren, C., Budziszewski, R., & Gilchrist, J. (2019). When a sense of “we” shapes the sense of “me”: Exploring how groups impact running identity and behavior. *Self and Identity*, 18, 227–246. <https://doi.org/10.1080/15298868.2018.1436084>.
- Fraser-Thomas, J. L., Côté, J., & Deakin, J. (2005). Youth sport programs: An avenue to foster positive youth development. *Physical Education and Sport Pedagogy*, 10, 19–40. <https://doi.org/10.1080/1740898042000334890>.
- Fredricks, J. A., & Eccles, J. S. (2005). Family socialization, gender, and sport motivation and involvement. *Journal of Sport & Exercise Psychology*, 27, 3–31. <https://doi.org/10.1123/jsep.27.1.3>.
- Funder, D. C., & Fast, L. A. (2010). Personality in social psychology. In D. Gilbert, & S. Fiske (Eds.). *Handbook of social psychology* (pp. 668–697). (5th ed.). New York, NY: Wiley.
- Goldman, L., Giles, H., & Hogg, M. A. (2014). Going to extremes: Social identity and communication processes associated with gang membership. *Group Processes & Intergroup Relations*, 17, 813–832. <https://doi.org/10.1177/1368430214524289>.
- Haidt, J. (2003). The moral emotions. *Handbook of Affective Sciences*, 11, 852–870.
- Haslam, S. A., Postmes, T., & Ellemers, N. (2003). More than a metaphor: Organizational identity makes organizational life possible. *British Journal of Management*, 14, 357–369. <https://doi.org/10.1111/j.1467-8551.2003.00384.x>.
- Haslam, S. A., Steffens, N. K., Peters, K., Boyce, R. A., Mallett, C. J., & Fransen, K. (2017). A social identity approach to leadership development: The 5R program. *Journal of Personnel Psychology*, 16, 113–124. <https://doi.org/10.1027/1866-5888/a000176>.
- Herbison, J. D., Benson, A. J., Martin, L. J., & Bruner, M. W. (2017). *The development of a systematic coding system for the electronically activated recorder for youth sport settings*. Hamilton, Ontario: Canada Paper presented at the Eastern Canadian Sport and Exercise Psychology Symposium.
- Holt, N. L., & Neely, K. C. (2012). Positive youth development through sport: A review. *IberoAmerican Journal of Sport Psychology*, 6, 299–316.
- Kavussanu, M., & Ring, C. (2016). Moral thought and action in sport and student life: A study of bracketed morality. *Ethics & Behavior*, 26, 267–276. <https://doi.org/10.1080/10508422.2015.1012764>.
- Lorenz, S. L. (2015). Media, culture, and the meanings of hockey. *International Journal of the History of Sport*, 32, 1973–1986.
- Respect in Sport (2014). Respect in sport: For parents. Retrieved from <http://www.respectinsport.com/about.html>.
- Rest, J. R. (1984). The major components of morality. In W. Kurtines, & J. Gewirtz (Eds.). *Morality, moral behavior, and moral development* (pp. 24–40). New York: Wiley.
- Reuters (2010). *Hockey is more than a game to Canadians*. Retrieved February 14 2020 from <https://www.reuters.com/article/us-olympics-ice-hockey-canada/hockey-is-more-than-a-game-to-canadians-idUSTRE60S00G20100129>.
- Ross, A. J., Mallett, C. J., & Parkes, J. F. (2015). The influence of parent sport behaviours on children's development: Youth coach and administrator perspectives. *International Journal of Sports Science & Coaching*, 10, 605–621. <https://doi.org/10.1260/1747-9541.10.4.605>.
- Shields, D. L. L., & Bredemeier, B. J. L. (1995). *Character development and physical activity*. Champaign, IL: Human Kinetics.
- Shields, D., Bredemeier, B. L., LaVoi, N. M., & Power, F. C. (2005). The sport behaviour of youth, parents and coaches. *Journal of Research in Character Education*, 3, 43–59.
- Stets, J. E., & Burke, P. J. (2000). Identity theory and social identity theory. *Social Psychology Quarterly*, 63, 224–237. <https://doi.org/10.2307/2695870>.
- Strachan, S. M., Brawley, L. R., Spink, K. S., Sweet, S. N., & Perras, M. G. (2015). Self-regulatory efficacy's role in the relationship between exercise identity and perceptions of and actual exercise behaviour. *Psychology of Sport and Exercise*, 18, 53–59.
- Tajfel, H. (1981). *Human groups and social categories*. Cambridge, England: Cambridge University Press.
- Tamminen, K. A., Poucher, Z. A., & Povilaitis, V. (2017). The car ride home: An interpretive examination of parent–athlete sport conversations. *Sport, Exercise, and Performance Psychology*, 6, 325–339. <https://doi.org/10.1037/spy0000093>.
- Tangney, J. P., Stuewig, J., & Mashek, D. J. (2007). Moral emotions and moral behavior. *Annual Review of Psychology*, 58, 345–372. <https://doi.org/10.1146/annurev.psych.56.091103.070145>.
- Tremblay, M. S., Barnes, J. D., González, S. A., Katzmarzyk, P. T., Onywera, V. O., Reilly, J. J., & Tomkinson, G. R. (2016). Global matrix 2.0: Report card grades on the physical activity of children and youth comparing 38 countries. *Journal of Physical Activity and Health*, 13, 343–366.
- Visek, A. J., Watson, J. C., Hurst, J. R., Maxwell, J. P., & Harris, B. S. (2010). Athletic identity and aggressiveness: A cross-cultural analysis of the athletic identity maintenance model. *International Journal of Sport and Exercise Psychology*, 8, 99–116. <https://doi.org/10.1080/1612197X.2010.9671936>.
- Wang, Y., Yuan, B., Roberts, K., Wang, Y., Lin, C., & Simons, R. F. (2014). How friendly is a little friendly competition? Evidence of self-interest and empathy during outcome evaluation. *International Journal of Psychophysiology*, 91, 155–162. <https://doi.org/10.1016/j.ijpsycho.2013.10.009>.
- Wann, D., & Branscombe, N. (1995). Influence of identification with a sports team on objective knowledge and subjective beliefs. *International Journal of Sport Psychology*, 26, 551–567.