

Sport Parent Sideline Behavior in Youth Baseball and Ice Hockey

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## **Abstract**

Over 75% of children in Canada participate in organized sport (Active Healthy Kids Canada, 2015) and parents are an important source of support in youth sport participation (Omli & Wiese-Bjornstal, 2011). While many parents display good behavior on youth sport sidelines, some poor sideline behavior still exists and can detract from the positive environment desired for youth sport participants (Bowker et al., 2009). This study combined research from the fields of sport psychology and sport management to examine, from the perspective of parents, personal and situational factors that influenced parent behavior on youth sport sidelines. An ecological model (Bronfenbrenner, 1977) of influences on sport parent sideline behavior is presented and was used to create an online survey for ice hockey and baseball parents in provincial sport organizations in western Canada. In total 1040 parents completed the survey, 625 baseball parents and 415 hockey parents. Some differences based on personal (gender and sport experience) and situational (sport type, stakes, and occurrence) factors were found, but overall parents reported poor behavior was low and most poor behaviors were unacceptable, regardless of the situation. Results from this study can be used to educate parents and inform future sport parent sideline behavior studies.

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## Chapter 1: Introduction

Sport is a popular activity for children and adolescents in Canada, where 75% of children 5-19 years old across the country participate in some form of organized sport (Active Healthy Kids Canada, 2015). It is important that providers of youth sport strive to create a positive climate to decrease drop out and increase the chances that athletes will receive positive psychological, physical, and social benefits that can result from participating in sport. One influence on the sport experience of children is, of course, their parents. Parents are an important source of support (Omli & Wiese-Bjornstal, 2011), therefore ensuring parents act in ways that positively support and encourage sport participation is necessary—including behaviors exhibited on the sidelines during competition.

While popular media has focused on some sensational stories about poor behavior by parents on youth sport sidelines, most researchers indicated that very few parents act poorly (e.g., Kidman, McKenzie, & McKenzie, 1999; Randall & McKenzie, 1987; Wiersma & Sherman, 2005), but agree that poor behavior is still a problem when it does occur (Bowker et al., 2009). As parents are a necessary part of youth sport, understanding what influences parent behavior is an important part of improving sideline behavior in youth sport. In the context of collegiate sports, several studies have examined spectator sideline behavior (e.g., Jamieson & Orr, 2009; Wann, Carlson, & Schrader, 1999; Wann, Haynes, McLean, & Pullen, 2003; Ward Jr., 2002). Researchers found that there may be some personal and situational factors that influence spectator behavior on sport sidelines, including gender, previous sport experience, and viewing aggressive behavior. This research is currently limited to collegiate sport fans, however the factors that influence

behavior on college sport sidelines may be similar to factors identified as influencing behavior on youth sport sidelines.

Using Bronfenbrenner's ecological model (1977) to organize factors related to youth sport spectator behavior based on a literature review of all research published to date, it is clear that sport management and sport psychology research about sport spectators overlap and can inform new ways of examining sideline behavior in youth sport not previously considered. And yet, while most of the spectator behavior research in youth sport coalescing around sport parents has originated from sport psychology, the majority of sport spectator research is typically located in sport management and has not included the youth sport context. The general aggression model (Anderson & Bushman, 2002) often employed in college sport spectator sideline research (e.g., Wann et al., 2005) provides further evidence that both individual and contextual factors influence aggressive behavior and that these factors should be examined in conjunction with each other. By combining these previously separate bodies of research, it is possible to see the complex and multiple factors that may influence good and poor spectator behavior in youth sport within the specific context that spectators are operating. To date, no researchers have used the general aggression model as a framework to examine and understand behavior on youth sport sidelines. Considering that many of the spectators on youth sport sidelines are parents (Shields, Bredemeier, LaVoi, & Power, 2005), the present study focused specifically on parent behavior on youth sport sidelines.

After reviewing previous research on parent behavior on youth sport sidelines, several personal and situational factors were identified as needing further study, including gender of parent, previous sport experience, type of sport, the stakes of a situation, and

occurrences or actions displayed by others during a game. The purpose of this study is to better understand sport parent sideline behavior from the perspective of sport parents in two different sport types—ice hockey and baseball. Ice hockey and baseball were chosen for two reasons. First, researchers have argued that different sports may have different norms and practices and therefore studies should consider each sport separately when examining behavior (Gould, Lauer, Rolo, Jannes, & Carolina, 2008). Second, sports can be classified in different ways, including as team or individual, aggressive or nonaggressive, and stylistic or nonstylistic (Wann, Schrader, & Wilson, 1999; Wann, Grieve, Zapalac, & Pease, 2008). Ice hockey and baseball differ in only one of these categories (aggressive or nonaggressive) to minimize confounding factors. Some researchers have indicated aggressive sports may elicit different responses by fans at the collegiate level (e.g., Ward Jr., 2002), hence the decision to compare an aggressive sport to a nonaggressive sport at the youth level. Parents were asked to identify the frequency of behaviors displayed by themselves and other parents on youth sport sidelines, the acceptability of these behaviors, and whether the frequency and acceptability varied when circumstances changed.

This study is significant for a number of reasons. This is an area not previously researched (parent perceptions about sideline behavior), a unique theoretical framework was used, and result-driven recommendations for youth sport administrators and stakeholders who were involved in the study were generated. The theoretical framework is more complex than in previous sport parent sideline behavior research and answers a call to focus on *why* behaviors are happening in sport rather than just describing *what* is happening (Holt & Knight, 2014). In addition, the literature used create the theoretical



framework comes from both the sport psychology and sport management fields, which allows this study to go beyond the borders of each field to better understand the perspective of parents on youth sport sidelines. By examining personal and situational factors of youth sport parent behavior using a combined multi-disciplinary theoretical framework—the ecological model (Bronfenbrenner, 1977) and the general aggression model (Anderson & Bushman, 2002)—this study has many potential implications for improving the landscape of youth sport and the participation experience of young athletes. The purpose and significance of this study are expanded on in Chapter 2 after the background literature and theory are further described.

Using an online, cross-sectional survey of youth ice hockey and baseball parents in two provincial sport organizations in western Canada, the overarching purpose was twofold to determine: 1) the frequency and acceptability of poor sideline behaviors, and 2) whether personal and situational factors impacted parents' perceptions about the acceptability of, and willingness to, display poor sideline behaviors. Overall parents reported poor behavior happening relatively infrequently but factors related to increased poor behavior were evident. Parents generally reported fathers behaved worse than mothers and ice hockey parents reported more poor behavior than baseball parents. Certain situations elicited more poor behavior in both sports, but parents largely were not accepting of poor behavior regardless of the situation. These results can be used not only to add to the current body of sport parent sideline behavior research but also to inform education programs for the provincial sport organizations involved in the study and future sport parent sideline behavior research studies.

In the next chapter, current literature related to this study, including sport spectator research, the general aggression and frustration-aggression theories, sport parent sideline behavior research, and how these theories and research can be combined using an ecological model to create the Sport Parent Sideline Behavior Model. Following Chapter two, the methods and results are described in detail in Chapters three and four respectively, and the conclusion, discussion and application of the present study is in Chapter five. There is a body of research demonstrating what parents are doing on youth sport sidelines, which is reviewed here and used to guide the present study as we move toward understanding why parents are displaying particular behaviors. Viewing behavior from the perspective of parents provides a unique view not taken in much of the sport parent sideline behavior research and therefore adds to the current body of knowledge in this area.

## Chapter 2: Literature Review

### Youth Sport Participation

Out of the 5.6 million children in the Canada (Statistics Canada, 2015), parents reported over 75% of children participating in organized physical activity or sports (Active Healthy Kids Canada, 2014). There are many potential psychological, physical, and social benefits to youth sport participation, including having fun, learning new skills, making friends, developing character, experiencing healthy competition, being part of a team, gaining strength, improving coordination, and improving overall health through increased cardiovascular and musculoskeletal fitness and decreased risk of chronic disease (Hedstrom & Gould, 2004; Petersen, 2010; Warburton, Nicol, & Bredin, 2006; Weiss & Wiese-Bjornstal, 2009). In order for children to realize these benefits, they need to be involved in a positive sport climate.

According to Active Healthy Kids Canada (2014), 83% of all 5-10 year olds participate in organized sport but participation levels decrease to 61% for 15-19 year olds. The rates of drop out are more pronounced with girls compared to boys, as boys participation drops from 91% of 5-10 year olds to 48% at ages 15-19, compared to 88% of 5-10 years olds and just 30% of 15-19 year old girls. Overall less than 50% of children are participating at an activity level high enough to receive the social and physical benefits of sport (Weiss & Wiese-Bjornstal, 2009). The health consequences of inactivity in adulthood are well documented, and sport participation during childhood is a predictor of activity levels in adulthood (Telama, Yang, Hirvensalo, & Raitakari, 2006). Therefore, creating a youth sport environment that is positive, safe, mastery-based, autonomy supportive and caring increases the likelihood that a greater number of children will

enjoy their participation experience, and therefore reap the health and developmental benefits in adolescence and into adulthood (Hedstrom & Gould, 2004).

There are many sports available for young athletes to participate at the school and community level. Two sports that are popular for both boys and girls in western Canada are baseball and ice hockey. Over the past ten years, baseball in Alberta has grown from 8,390 participants in 2006 to over 12,000 in 2015, including both boys and girls teams (D. Dekinder, personal communication, November 23, 2015). Looking at hockey participation, numbers have remained steady at over 63,000 for the past five seasons and there is growth in some emerging forms of the sport like pond and sledge hockey (B. Lyon, personal communication, November 23, 2015). In a province with just over 4 million people, and close to a quarter of that number under 18 years old (Statistics Canada, 2015), these participation numbers show the popularity of these sports.

Children participate in and drop out of sport for many different reasons. The number one reason given for participation by both boys and girls was to have fun, followed by perceived competence at the given activity, staying in shape, learning new skills, getting better at skills, and being part of a team (e.g., Hedstrom & Gould, 2004; Seefeldt, Ewing, & Walk, 1992; Walters, Payne, Schluter, & Thomson, 2015). Winning, while listed as a motive for some children, was not among the top reasons for participation. Children who dropped out cited various reasons for leaving, including not having fun, lack of interest, participation in other activities, and the coach playing favorites. Digging deeper, researchers found that some children dropped out of sport because they were not getting playing time or learning skills because the emphasis was on winning and playing at a high level of competition (Crane & Temple, 2015; Hedstrom

& Gould, 2004). Given these reasons for participation and attrition, adults responsible for youth sport programs (including coaches, parents, and administrators) should strive to create an environment that encourages fun, skill development, and social interaction, rather than one that reflects a win at all costs focus.

Although many argue that youth sport is a character building, positive experience for children, this is not a guaranteed outcome and depends partially on the way in which adults structure the experience and the level and type of involvement of the adults (Coakley, 2009b). Parents are one group of adults that are salient in creating a positive environment for young athletes. In the next section literature on parental roles, involvement, and influence in youth sport will be summarized.

### **Parents in Youth Sport**

Parents have many roles that can impact their child's experience in sport. Many children are exposed to sport first by their parents, who are then responsible for enrollment, buying equipment, and taking them to practices and games, as well as often volunteering in some capacity (Bowker et al., 2009; Fredricks & Eccles, 2004). This can include jobs such as coaching, working as a team manager, providing snacks, organizing year-end celebrations, organizing tournaments, or serving on a board (Omli & Wiese-Bjornstal, 2011). Parents often have significant investments of time and money in their child's sport experiences, including driving them to and from practices and games and paying coaching and equipment fees, as well as providing support emotionally and encouraging their child in their participation (Bowker et al., 2009).

Along with practical roles, parents are a source of support for young athletes (Fredricks & Eccles, 2004) and can influence various dimensions of their child's health.

Another important role of parents is that of being a fan. Unlike professional sports, the sidelines of youth sports are likely to be filled with family and friends of the athletes, including parents (Shields et al., 2005) who can both positively and negatively influence young athletes. The influence of parents in the youth sport environment on child health and specifically the influence of parental sideline behavior will be examined in further detail here.

**Parental influence on children's health in sport.** Parents are an important provider of experience and source of feedback and information for young athletes (Fredricks & Eccles, 2004). This extends into several dimensions of young athlete health, including mental, physical, and social. While many parents contribute to healthy development across these domains, this is not true for all parents.

***Parental influence on mental health.*** The influence of parent behavior on the mental health of athletes can include both positive and negative outcomes. Positive outcomes include increased motivation, enjoyment, and perceived competence, and these outcomes were influenced by a variety of parent behaviors. Fredricks and Eccles (2004) reported that overall motivation of the athlete was increased when parents had both high expectations for success and were perceived to value sport. Exposure to sport, buying sporting equipment, transportation to and from practices and games, watching their child's sport events, providing feedback and contingent praise, emotionally supporting their child and limiting pressure to perform were all parental behaviors related to increased athlete motivation and enjoyment (Babkes & Weiss, 1999; Côté, 1999; Fredricks & Eccles, 2004; Keegan, Spray, Harwood, & Lavalley, 2010; Nunomura & Oliveira, 2013). Excessive praise and punishment from parents were found to decrease

motivation (Fredricks & Eccles, 2004) and too much pressure from parents was found to positively predict amotivation in athletes and was negatively associated with athlete enjoyment (Sánchez-Miguel, Leo, Sánchez-Oliva, Amado, & García-Calvo, 2013).

Athletes' perceptions of the degree of parental involvement indicate there is a "just right" degree of parental involvement that provided enjoyment and did not cause stress (Stein, Raedeke, & Glenn, 1999). What each athlete considers to be "just right" however, will vary by athlete and fluctuate throughout an athlete's career (Domingues & Gonçalves, 2013), therefore parents should communicate with their children as to what degree of involvement is best for their child. It also should be noted that mothers and fathers do not always influence children in the same ways. While many studies use parental influence as a single variable rather than separating and examining the influence of mothers and fathers, there is some evidence to suggest that mothers and fathers have different influences on youth athletes. Fathers may have more influence than mothers in some sport contexts like hockey (LaVoi & Stellino, 2008), and there may be a different impact on an athlete's perception of competence and enjoyment depending on both the parent's gender and level of involvement (Babkes & Weiss, 1999).

Perceived competence was another positive mental health outcome that was influenced by parent behavior. Children who perceived high parental value of sport had higher levels of perceived competence (Brustad, 1996). Parenting style has also been linked to perceived competence. A high challenge parenting style specifically was found to increase perceived competence in physical domains (Kimiecik & Horn, 2012). Additionally, a supportive parenting style promoted self-esteem and was related to increased levels of physical activity (Ornelas, Perreira, & Ayala, 2007).

Negative mental health outcomes of parent behavior can include stress, anxiety, and burnout. Stress can be the result of pressure from parents (Fredricks & Eccles, 2004) and can lead to feelings of entrapment, burnout, and may eventually result in sport drop out (Nunomura & Oliveira, 2013). Additionally, negative mental health outcomes for youth athletes may result from exposure to background anger within youth sport contexts (Omli & LaVoi, 2009), which is an angry interaction taking place between a parent and another adult to which a child is exposed, but not directly involved. Background anger can include parents interacting with other parents, coaches, or referees, and may include verbal, nonverbal, or physical interactions.

Background anger (BA) has been studied mainly in the context of marital conflict in homes (Cummings, 1987) but recently has been applied to the youth sport context. Several factors have been identified that appear to increase the effects of background anger in children, and Omli and LaVoi (2009) argued that the presence of these factors in youth sport create a “perfect storm” (p. 254) for background anger to occur. First, although children reported both adult-adult and adult-child conflict as negative, children tend to be more mad and scared of adult-adult verbal arguments than arguments between adults and children (El-Sheikh & Cheskes, 1995). While 14% of parents reported yelling at officials from the sidelines, 68% of athletes reported that they saw spectators yelling at officials and 39% of athletes witnessed spectators yelling at coaches (Shields et al., 2005). This evidence demonstrates the presence of adult-adult verbal conflict within the youth sport environment. Second, Harger & El-Sheikh (2003) found that when background anger involved men, it was more distressing for children than BA involving women. There are more male coaches and referees at all levels of sport (Acosta &



Carpenter, 2014; LaVoi, 2015; “Women in High School Sport,” 2012) making it more likely for angry interactions to involve men. Third, further research revealed that both verbal and nonverbal anger could be distressing to children (De Arth-Pendley & Cummings, 2002). Since children can often see their parents during sport events, it is possible that parents who appear angry can increase a child’s stress even if they are not yelling.

Fourth, consequences of background anger do not appear to decrease over time. Children tend to become more sensitive rather than desensitized to background anger if they are continually exposed to it. Based on available data in sport contexts, the amount of background anger in youth soccer increased as children aged, plateauing when athletes were about 16 years old (Omli & LaVoi, 2009). Fifth, the amount of control a child perceived in a situation affected the consequences of BA. When children did not perceive having any control, they tended to be more negatively affected than when some perceived control was present (El-Sheikh & Cummings, 1992). In youth sport settings, children are unlikely to have control over their parents’ behavior on the sidelines, which could increase the negative effects of background anger. Finally, whether or not conflict could be resolved affected children’s reactions to BA. A situation where conflict was not resolved was more distressing than when conflict was resolved. Since much of the background anger reported in youth sport was from parents yelling at coaches, referees, or athletes, it is unlikely that conflict would be resolved due to the unidirectional nature of the conflict (Omli & LaVoi, 2009). Consequences of background anger can include stress and maladaptive behavior, such as aggression (Cummings, 1987). Chronic stress can lead to burnout (Fredricks & Eccles, 2004), which can result in athletes dropping out

of sport completely.

In a recent study focused specifically on youth ice hockey players, background anger was found to influence feelings and performance for both male and female athletes, with female athletes being more negatively affected than male athletes (Winges, 2012). Female athletes reported greater reduction in performance and more distressing feelings than male athletes, and overall all athletes were more negatively impacted by examples of background anger from fathers compared to mothers. Out of the 237 hockey players surveyed, 62% reported witnessing background anger during their games and found this type of behavior to be unacceptable. Another specific negative impact of parent behavior can be increased anxiety.

Pressure from parents has been linked to increased athlete anxiety (Fredricks & Eccles, 2004), however this may be dependent on the climate in which the child is participating. O'Rourke, Smith, Smoll, and Cumming (2011) found that low mastery climates that focus on winning and other-referenced comparisons, combined with parental pressure, did increase anxiety, but that parental pressure in a high mastery climate (where effort and self-improvement are promoted) did not increase anxiety. It would appear that pressure from parents in itself does not necessarily cause anxiety, but that context must also be considered. Due to the mind-body connection, some of the mental health consequences for youth athletes that result from negative sport parent behaviors are related to physical health concerns, which will be summarized in the next section.

***Parental influence on physical health.*** The physical dimension of a young athlete's health includes the athlete's overall health and specifically their risk of injury.

As noted above, parents are important providers of sport experience, and physical activity can promote and increase the likelihood of health benefits for youth athletes. Parental behavior that increases intrinsic motivation leads to increased involvement in physical activity (Wiese-Bjornstal, 2007), which can provide health benefits such as improved cardiovascular and musculoskeletal fitness, changes toward a healthier body composition, and decreased risk of chronic diseases (Warburton et al., 2006). Modeling, that is, when parents engage in behavior they want their children to also engage in, may also be an effective mechanism for increasing children's levels of physical activity, although mixed results have been found (Fredricks & Eccles, 2004; Horn & Horn, 2007). Modeling may be more effective for younger children who are not as influenced by their peers (Horn & Horn, 2007). Not all young athletes have the same access to sport participation and the related health benefits though, as some parents provide more opportunities to sons compared to daughters, perhaps coupled with a belief that sports are more important and valued for boys than for girls (Fredricks & Eccles, 2004; Wiese-Bjornstal, 2007).

To date, little research has focused on injuries in young athletes, yet injury is one reason young athletes drop out of sport (Wiese-Bjornstal, 2004). In relation to parent behavior, perceived stress by athletes is linked to an increased risk of injury. The parent behaviors described in the previous section on background anger are related to stress in young athletes, therefore may increase risk of injury. Additionally, life stress, including major life-event stressors, also contributes to increased injury risk. Major life-event stressors for children caused in part—or entirely—by parents can include divorce, separation, moving, or changing schools (Wiese-Bjornstal, 2004). These events are more

common today than for previous generations, therefore parents should be aware of potential consequences of their actions on athletes' physical health.

There are situations where the absence of parent behavior can increase a young athlete's risk of injury. Parent involvement can be characterized as under, moderately, or overinvolved (Hellstedt, 1987), and while overinvolved parents can increase athlete stress and therefore risk of injury, underinvolved parents may also increase risk of injury by not removing athletes from dangerous situations, such as when coaches have athletes train through illness or do not provide proper instruction (Wiese-Bjornstal, 2004).

Unhealthy cultures where winning is valued above athlete health may be detrimental to athletes' physical health if parents fail to act, but it may be difficult for parents to know the difference between helping their child succeed and protecting athlete health. Parent education could be useful in teaching parents about the culture of a sport and potential dangers, but coaches who are operating in these ways may not be open to offering education to parents and likely do not recognize the problematic behavior. The continuum of parent involvement certainly has implications for athletes' mental and physical health, but what it means to be under and overinvolved is not clearly defined and varies based on athlete perception of parent behavior. The impact of parents on a child's social health is another important aspect of parental involvement in sport.

***Parental influence on social health.*** In addition to mental and physical health, parent behavior can also impact a young athlete's social health outcomes. Social health is the quality of relationships and skills related to working with others, including cooperation, relationships with friends, sportsmanship, teamwork, and integration with a peer group (Eime, Young, Harvey, Charity, & Payne, 2013). Background anger by

parents was described previously as a potential cause of stress in young athletes, but it may also contribute to poor social health for athletes. Parents who yell on the sidelines can be embarrassing to athletes (Shields et al., 2005) which may in turn decrease peer acceptance. Parents can positively contribute to peer acceptance by providing opportunities for sport involvement since sport is viewed by many children as a culturally valued activity, and therefore can be a pathway to peer acceptance (Coakley, 2009a). Unfortunately, not all parents are able to provide these socially relevant opportunities for their children due to lack of time, money, resources or a combination of these and other factors, or when they do provide opportunity but show up and create a negative sideline climate, and end up negatively influencing their child's social health.

Another potential healthy social outcome for youth athletes is the development of moral reasoning skills, including sportsmanship, which is a specific moral behavior centered on issues such as respect, ethics, and fairness in sport (Shields, LaVoi, Bredemeier, & Power, 2007). In a hockey study, athletes reported performing more good behavior on the ice when they perceived fathers' promoting learning and enjoyment of the sport (Davies, Babkes Stellino, Nichols, & Coleman, 2016). While good sportsmanship can be developed through sport, a modest relationship has been found between parents' actions and poor athlete sportsmanship when parents were perceived to have poor behavior or promoted a low mastery environment (LaVoi & Stellino, 2008; Shields et al., 2007). Additionally, positive sideline behavior perceived by youth predicted athletes' positive behavior on the court, whereas negative spectator behavior was associated with negative athlete behavior (Arthur-Banning, Wells, Baker, & Hegreness, 2009). Parent behavior on the sidelines has the potential to impact the actions

of young athletes and either impede or foster healthy social outcomes, such as acceptance and sportsmanship, and therefore it is important to know what sort of behavior parents are displaying on youth sport sidelines. Many researchers have examined what kind of adult behavior exists on youth sport sidelines, and this research will be reviewed in the next section.

**Parent sideline behavior.** Recently, attention has been drawn to sport parent sideline behavior, particularly in popular media. Stories about poor parent behavior are commonplace, and construct the idea of an increasing and more frequent epidemic of bad behavior. For example, a quick internet search produces a story of a father punching another father in the face during a fourth grade football practice (CBS New York, 2012) and a father being released from jail after serving time for killing another parent during an ice hockey game (Baysinger, 2010). In early 2015, a video was circulated of a parent hitting the glass repeatedly to the point of smashing the glass during a youth ice hockey tournament in Pennsylvania (Wyshynski, 2015). In Canada, hockey parents in part of British Columbia are now required to do an online sportsmanship class to be allowed into the arena to watch their children play minor hockey after five parents were banned for verbal abuse in the stands (CBC News, 2015).

The Citizenship Through Sports Alliance (2005)—comprised of a panel of youth sport experts—assessed, among other areas, parent behavior in youth sport. An overall grade of “D” was given to parents, with specific elements such as understanding of roles and overall appropriate behavior receiving an “unacceptable” rating and parental expectations of their children receiving a “needs improvement” rating. While sensational stories in the media may have some individuals uncritically accepting that violence and

inappropriate behavior among sport parents is increasing (Wolff, 2012), examination into the history of sport parent behavior reveals that not only is poor parent behavior not a new phenomenon, but also that it is a relatively uncommon occurrence.

***Youth sport parent behavior, 1930s-1980s.*** Since the beginning of the twentieth century, children have been participating in organized sport. Organizations such as Little League baseball, Pop Warner football, and Bidly basketball were founded in the 1930s and 1940s, and poor parent behavior has existed in these organizations for as many years (Fields, 2008). Parents were described in the 1960s as “loud, abusive types who pushed their children too hard and threatened coaches, umpires, and opposing players” (Fields, 2008, p. 6), which led to the formation of the American Youth Soccer Organization, founded in part as a sport organization that intentionally had little parent involvement. In Michener’s 1976 book, *Sports in America*, his description of sport parents in the 1930s and 40s is remarkably similar to what is seen in youth sport today. He described baseball parents as “all too often giv[ing] vivid examples of foolish deportment” (Michener, 1976, p. 101) when attending games. Parents holding their children back to repeat eighth grade to have them enter high school when they were older and helping their children illegally modify their cars to win Soap Box derbies were also commonplace at that time. Based on historical accounts, poor parent behavior in youth sport is not a new phenomenon.

***Youth sport parent behavior, 1980s-present.*** Over the past 35 years, several studies have examined the behavior of parents at youth sport events, providing a more complete and evidence-based picture of youth sport sidelines. This research has typically taken one of two forms: observational studies and self-report studies. Both types of studies will be described here to create the picture of the current climate of youth sport sidelines.

*Observational studies.* Despite anecdotal evidence to the contrary, one of the first studies on parent behavior on the sidelines found very few (0.42%) negative comments by parents and other spectators (Walley, Graham, & Forehand, 1982). The low frequency may be due to the age of the athletes (5 to 8 years old) and the researchers hypothesized that the number of negative comments would increase as athletes moved to more competitive levels. Similarly, Randall and McKenzie (1987) reported that 87.5% of the time, parents were silent observers of soccer games. In the remaining 12.5% of the time, the majority of verbal comments were instructional (74.4%), followed by positive (19.8%) and negative (5.8%) comments. Interestingly, in this study researchers also found that verbal comments, including negative comments, were more prevalent among younger athletes (6-7 years old) compared to older athletes (10-11 years old), and that negative comments were slightly higher when a team was winning (Randall & McKenzie, 1987).

Observations of several different youth sport events in New Zealand indicated that comments made from spectators were mostly positive (47.2%), but negative comments still made up 34.5% of the sideline comments (Kidman et al., 1999), with the remaining being classified as neutral. The difference in negative comments compared to the previous study may be due, in part, to differences in classification of comments. In the Kidman et al. study, instructing and correcting comments by parents were classified as negative, rather than neutral, as in previous studies. The negative classification was used because researchers observed that when parents gave corrections or advice during games, children would sometimes stop and attempt to change their performance. This was deemed detrimental to learning and decision-making processes of the children (Kidman



et al., 1999), as well as distracting and potentially embarrassing. The inconsistency in observational methods of coding parent sideline behaviors across studies makes it difficult to directly compare studies over time and therefore to create an accurate depiction of parent sideline behavior.

In Mississippi, 102 parents were observed at recreational basketball, soccer and baseball/softball games. Comments were found to be positive 52% of the time and negative about 32% of the time (Blom & Drane, 2008). Similarly, naturalistic observations of youth ice hockey games found that over 50% of comments made during 69 games were positive (Bowker et al., 2009). Negative comments occurred much less frequently than expected (about five negative comments per game out of over 100 comments), “suggest[ing] that such aggressive behavior is relatively rare, making such conduct that much more salient and inappropriate when it does occur” (Bowker et al., 2009, p. 311) and causing that parent to stand out in the group when they made negative comments.

In another observational study, researchers found that parent comments during soccer games could be placed into six categories along a continuum from supportive to controlling (Holt, Tamminen, Black, Sehn, & Wall, 2008). The most prevalent categories were praise/encouragement and instruction, which each contained 35% of all comments. Negative comments and comments that struck a balance between positive and negative comments were next most prevalent, at 10% each. The last two categories each contained 5% of the overall comments, and were feedback based on performance and derogatory comments (Holt et al., 2008).

Using the same categorization to record parent comments, Dorsch (2013) found that most comments were supportive (50-70% of all comments) and few comments were controlling when observing four parents over the course of several seasons when their children first starting participating in competitive sport. Negative comments were recorded 6-16% of the time, and 0-2% of all comments were coded as derogatory. Holt et al.'s (2008) continuum was also used for a longitudinal study that followed four parents over of five seasons in different sports (Dorsch, Smith, Wilson, & McDonough, 2015). On average, these parents were similar to the participants in the original study, with the exception of feedback based on performance, which was much higher (16-33%), and comments that struck a balance, which was much lower (1-5%). In addition to observing parents at youth sport events, some researchers asked parents and athletes to report their own and others' behavior on sidelines.

*Self-report studies.* While much of the sport parent sideline behavior research has used observational methods to report behavior, there is an emerging body of research that includes reports from parents and athletes on sideline behavior. When parents were asked to self-report poor behavior, 14% of parents indicated they had yelled at a referee after a perceived bad call and 10% of parents affirmatively replied that they had acted in a way they regretted later (Shields et al., 2005). In this study researchers also asked athletes, coaches, and parents about their perceptions of spectator behavior, and found that 38% of athletes and 59% of parents and coaches reported being embarrassed by fan behavior (Shields et al., 2005), revealing that parents may not be aware of the perception of their behavior by others. This is an important finding considering that spectators at youth sport events are, for the most part, parents (Omli & LaVoi, 2009; Shields et al., 2005). Similar

findings were reported in a study of tennis parents, where 20% admitted to acting poorly and 29% of their children were embarrassed by the behavior of their parents (DeFrancesco & Johnson, 1997). Behaviors athletes found embarrassing included parents walking away from the court during a game and yelling at athletes from the sidelines.

More recently, athletes were asked to report on parent sideline behavior during their hockey games in Canada (Jeffery-Tosoni, Fraser-Thomas, & Baker, 2015). Children reported most of time their parents were cheering and that instructional or negative comments were only reported from fathers, not mothers. When asked about other parents on the sidelines, athletes reported that lots of parents cheered and encouraged the team and that negative comments were often targeted specifically at someone (referee, player, or coach) as a result of a specific incident. Athletes also reported that negative comments were more likely to come from the other team's parents rather than from their team's parents. Many of the participants in this study reported hearing instructional comments and some thought this was confusing because they did not know who to listen to, while others simply ignored or tuned out the comments. Interestingly, some athletes reported instructional comments as negative comments highlighting the importance of understanding how athletes interpret situations rather than assuming adult understanding on a situation (Jeffery-Tosoni et al., 2015).

As summarized in the previous section, parental yelling and other poor behaviors associated with background anger can have a negative impact on participants in youth sport, even if these behaviors are not happening as frequently as the media might portray. Given the discrepant observations and self-report of sport parent behaviors, some

researchers have diverged from observing parents to considering how athletes prefer their parents and other adults to act on youth sport sidelines.

*Athlete preferences for parent behavior.* Building on data pertaining to the type and frequency of spectator behavior observed on youth sport sidelines, Omli and Wiese-Bjornstal (2011) asked children in a variety of sports what their preferences were for parent sideline behavior. They found that children viewed parents as acting in one of three roles: a supportive parent, a demanding coach, or a crazed fan. Overwhelmingly, children preferred that parents act as a supportive parent, which included sitting quietly and cheering, encouraging and praising athletes, being empathetic, and intervening in cases where the child needed to be protected. The majority of children reported they never wanted parents to act like a crazed fan, which included arguing, blaming, derogation, disruption, yelling, and fanatical cheering. Children reported that sometimes parents could act like a demanding coach, although children did not always like these behaviors. The behaviors of a demanding coach included providing advice, instruction, and critical encouragement (Omli & Wiese-Bjornstal, 2011).

In another study, youth tennis players provided similar responses about their preferences for parental behaviors at competitive events (Knight, Boden, & Holt, 2010). Athletes wanted parents to focus comments on attitude and effort, rather than offering technical advice. Additionally, athletes thought when parents provided comments, their nonverbal behavior (such as facial expressions and gestures) should match the comments, and that parents should, at all times, respect general etiquette in tennis.

Youth ice hockey players reported wanting parents to cheer loudly but also sometimes just keep quiet (Jeffery-Tosoni et al., 2015). In this study some athletes

reported not being bothered by instructional comments, but when asked to describe an ideal parent on the sidelines none of the athletes wanted parents to yell out instructions from the sidelines—one of the top two most common sideline background anger behaviors identified by Omli and LaVoi (2009).

Focusing specifically on female athletes in team sports, Knight, Neely, and Holt (2011) found that during competitions athletes wanted parents to encourage everyone on the team, focus on effort, encourage athletes with positive interactions, and refrain from extreme emotions (both positive and negative). In addition, the athletes did not want parents to act in ways that drew attention to themselves, to coach from the sidelines, or argue with officials during a game. In sum, these findings also provide additional indirect evidence that children do see and hear the behaviors of adults on youth sport sidelines. While there is increasing evidence to support athletes' perceptions of parent behavior on the sidelines, one underexplored area is that of parent perceptions. One of the first forays into this area of research was examining parents' emotional experiences are when watching their child participate in sport. There are several behaviors that parents reported making them angry or stressed when on youth sport sidelines.

***Sources of anger and stress for parents on youth sport sidelines.*** Parents on youth sport sidelines report a variety of behaviors displayed by athletes, officials, coaches, or other parents that elicit emotional responses, including stress and anger. These responses may lead to background anger, and as previously discussed, background anger can create an environment where athletes experience chronic stress, burnout, or even drop out of sport completely (Omli & LaVoi, 2009).

Parents reported three categories of behaviors that made them angry while on the sidelines of youth sport events (Omli & LaVoi, 2012): uncaring, unjust, and incompetent behaviors. Uncaring behaviors included: (a) athletes' unsportsmanlike conduct and lack of effort; (b) parents' coaching from the sidelines, unsportsmanlike conduct, criticizing or yelling at the referee, criticizing or yelling at the coach, and getting involved in an altercation; and (c) coaches' criticizing or yelling at the referee, encouraging athlete unsportsmanlike conduct, and getting involved in an altercation. Two unjust behaviors were reported: referee unfairness and coach unfairness. Lastly, parents reported getting angry at referee and coach incompetence. Of these behaviors, the four were reported as making parents angry most often were: (a) referee incompetence (18.5%); (b) athlete unsportsmanlike conduct (12.7%); (c) coach incompetence (11.9%); and (d) parent unsportsmanlike conduct (11.0%; Omli & LaVoi, 2012).

In addition to factors in the youth sport environment contributing to and causing some parents to get angry, data from two studies by one research team identified several causes of stress for parents of youth tennis players. In a survey of 123 parents, causes of stress were found in seven different categories (Harwood & Knight, 2009b). These categories included competition (e.g., child's behavior and performance, other parents, controlling own emotions during a game), coaches (e.g., not always present, poor planning and communicating, showing favoritism), finance (e.g., fees for coaching, tournaments, equipment), time (e.g., missing work, limited time for athletes to do homework, missing family time), siblings (e.g., limited time to spend with siblings not playing tennis), organization-related (e.g., access to club, favoritism by administrators,

organization of tournaments), and developmental (e.g., uncertainty about athlete's future, lack of time to participate in other activities).

In a related tennis parent study (Harwood & Knight, 2009a) researchers examined the changes in stressors throughout stages of athlete development from sampling to specializing to investment. Harwood and Knight found that competitive stressors like the child's attitude and performance, watching games, interacting with other parents, and the actions of other children were stressors at all stages of development, however organizational and developmental stressors were not prevalent until athletes were in the specializing and investment stages. Organization stressors included the money and time invested, the actions of coaches, actions of the governing body, and support for injuries. Developmental stressors ranged from education for parents and transitions to higher levels to uncertainty about their athlete's future in the sport.

Through this review of existing sport parent research on observational and self-report sideline behavior as well as preferred parent behavior by athletes and factors that make parents stressed and angry, we see that while the majority of parents on youth sport sidelines are acting in ways that create a positive climate, some parents are not. In addition, many parents report being angry or stressed while watching their child participate in sport, which can be a precursor to acting in ways that do not create a positive climate. In focus groups with youth coaches in various sports, Wiersma and Sherman (2005) found that while coaches thought a code of conduct for parents was necessary, coaches thought it was only necessary for a small proportion of the parents in their organization. Importantly, potential for these "outlier" (i.e., negative and/or poorly behaving) parents to influence the experience of their own child and other children on

both teams, not to mention the experience of referees, coaches and other spectators around them, some of which are children, is concerning. It is concerning because based on existing data, an athlete's perception that a performance climate exists decreases the potential for a positive experience and increases the likelihood of drop out (Fredricks & Eccles, 2004; Nunomura & Oliveira, 2013).

A performance climate is one that emphasizes winning (which is not cited by children as a primary reason for sport participation), comparisons between athletes, and competition (Quested & Duda, 2011; Seefeldt et al., 1992; Weinberg & Gould, 2011). Poor parent behavior, such as coaching from the sidelines or yelling at the referee, may be perceived by athletes as an overemphasis on winning and thus contribute to a performance climate. A balanced focus on development, performance, and enjoyment are essential to creating a positive climate in sport (Vealey, 2005), and parents are an integral part of this balance.

When exploring parent behavior on youth sport sidelines, as evidenced thus far in this review of sport parent literature, much of the research is conducted from a sport psychology perspective of social influences in youth sport. To fully understand sport parent sideline behaviors, it may be helpful to also utilize and draw from research pertaining to sport spectators, which largely originates in the sport management literature. Since sport parents are spectators and a large majority of spectators on youth sport sidelines are parents, sport spectatorship is a useful area of literature that provides a new, unique, and additional way to examine and understand sport parent behavior. In the following section, research on sport spectator behavior will be examined along with relevant theories attempting to explain this behavior.



## **Sport Spectator Sideline Behavior**

Factors influencing spectator behavior on sport sidelines is a line of inquiry within sport psychology and sport management, with the majority of the focus in the United States being on aggressive acts by spectators in collegiate sport. There are also sideline behavior studies examining hooliganism (particularly in soccer) outside the United States and extreme fan behavior outside of the field of play (e.g., rioting after wins or losses). The focus of this section for the purpose of this study however, is on spectator perceptions about what happens *during* games, therefore the present review will be limited to research that focuses on spectator sideline behavior during games. Two relevant theories posited to help explain spectator behavior in sport, focus on the causes of problems: the general aggression model (Anderson & Bushman, 2002) and the frustration-aggression theory (Wann, Carlson, et al., 1999; Ward Jr., 2002) are reviewed in the following sections.

**General aggression model.** The general aggression model (Anderson & Bushman, 2002) provides utility for examining aggression that is relevant to sport parent sideline behavior. According to this theory, both personal and situational factors interact to influence aggressive behavior. Personal factors include traits, gender, previous experiences, attitudes, and situational factors include cues (i.e., images or objects that are previously related to aggressive behavior such as boxing gloves or even hockey sticks for some people), provocation from others in the situation, and frustration (Anderson & Bushman, 2002).

While many personal and situational variables of sport spectator behavior have been studied in a variety of sport contexts, few have been examined within a youth sport

context. Some personal and situational variables that may be particularly salient to study in youth sport given the previous literature reviewed on parental influence, background anger and sport parents are: gender, previous sport experiences of parents, environmental cues, provocation, and frustration. These factors, identified by researchers in a collegiate sport context, may be related to increased spectator aggression in youth sport contexts. What is known about gender, previous sport experiences of parents, environmental cues, provocation, and frustration related to spectators in general, and how it relates to the current study in youth sport contexts will be outlined next.

The personal variable of gender has been examined in some studies about fan behavior, although the results are inconsistent. In some cases, male fans were more likely to consider committing acts of aggression at collegiate basketball games than female fans (Wann et al., 2003) and were also more likely to be involved in spectator violence in many different sport contexts (Ward Jr., 2002). Additionally, males tended to be more accepting of verbal aggression, such as verbal abuse to officials, than females (Dimmock & Grove, 2005). In contrast, in other studies researchers found no differences in willingness to consider aggressive acts between male and female spectators, including hostile and instrumental aggressive acts (Wann, Carlson et al., 1999) and anonymous hostile aggressive acts (Wann et al., 2005). To date, gender of spectator as a personal variable has not been examined in terms of type, frequency or acceptability of behaviors within a youth sport context.

Other potentially important factors, including sport experience, cues, provocation, and frustration (Anderson & Bushman, 2002), that have not yet been examined in a youth sport context are presented here and warrant discussion about inclusion in sport parent

sideline behavior research. Sport experience is a personal factor that includes a person's previous playing experience of the sport they are viewing, which may influence actions on the sidelines. Cues are objects related to aggressive behavior (Anderson & Bushman, 2002) and in previous non-sport research, included guns or other weapons and violent scenes from television shows or movies. In a youth sport context, cues could include watching athletes playing an aggressive sport like ice hockey. There is limited research on the effect of sport type on youth sport spectator behavior, but researchers have suggested that in general more violent sports may lead to increased aggressive behavior from spectators (Coakley, 2009a; Jamieson & Orr, 2009).

Provocation is another factor to be examined with relation to aggression on sport sidelines. Verbal or physical aggression from others in a situation is considered provocation, and it is "perhaps the most important single cause of human aggression" (Anderson & Bushman, 2002, p. 37). In previous sport parent research, scholars have determined several occurrences such as coach and referee incompetence and athlete unsportsmanlike conduct that make parents angry during youth sport events (Omli & LaVoi, 2012), therefore it would be valuable to consider how these documented occurrences (i.e., the actions of others) influence sport parent sideline behavior.

**Frustration-aggression theory.** A related theory to the general aggression model is the frustration-aggression theory, positing that when a team plays poorly or loses, fans feel frustrated, potentially increasing aggressive behavior (Wann, Carlson, et al., 1999; Ward Jr., 2002). When spectators are in a situation where the stakes are higher, such as near the end of close game or the final game of playoffs, they may feel more frustration than when the stakes are lower. Wann and colleagues (2005) found that spectators

reported more willingness to commit an anonymous aggressive act after a loss. Perhaps when spectators are provoked by another in an occurrence that may make them angry, they will be more likely to respond aggressively in more frustrating or higher stakes situations. This hypothesis has not yet been tested in youth sport, but would be a valuable addition to current sport parent sideline behavior research and is part of the current study.

In sum, sport spectator research with a focus on collegiate fans, including the use of the general aggression model, is a helpful starting point for conducting research that will fill existing gaps related to what is known about sport spectators—specifically gaps that pertain to personal and situational factors in the context of youth sport. Parents are a “unique category of sports fanship” (Wells, 2004, p. 254) because they are typically very invested in their child’s sport career and have spent many hours involved in the sport, but may have little interest in the actual sport. This is different than general sport spectators/fans who are likely invested in the sport itself, or at least have an interest in the sport as well as the athletes and/or team. When conducting sport spectator research, it is therefore important to differentiate between parents as fans versus collegiate or professional sport fans, thus highlighting the importance of filling this gap in sport spectator research. To situate the personal and situational factors discussed in this section within the existing sport parent research, further illuminate gaps, and provide a foundation for the significance and purpose of this study, it is helpful and necessary to place the research on influences on sport parent sideline behaviors into an ecological systems model that pertains specifically to the context of youth sport. In the next section, a theoretical framework will be introduced to frame the current study, followed by the specific purpose and significance of this study.

## **Theoretical Framework**

The topic of youth sport parent sideline behavior has become an increasingly popular research area, with a moderate but growing body of sport parent literature, especially in the last ten years. Very little of this research, however, pertains to the influences on, and antecedents of, parent behavior in youth sport contexts. One way to examine influences on behavior within a context is to use an ecological model (Bronfenbrenner, 1977) This is a developmental model that organizes influences based on their proximity to an individual and specifies how behavior changes over one's life course. A developmental model is appropriate for sport parents because parents learn and change their behavior to some extent—either good or bad—over the course of their child's sport career from sampling years through investment and specializing years (Côté, 1999). The following section will explain the ecological model in general, describe why an ecological model is useful for understanding influences on sport parent behavior, and present a Sport Parent Sideline Behavior Model. Using this ecological model in conjunction with the general aggression model (Anderson & Bushman, 2002), a framework for the present study will be outlined that locates the current project within the landscape of sport parent and sport spectator research.

**Ecological Models.** Ecological models, based on Bronfenbrenner's (1977) ecological systems theory, helped forward understanding of human development as a product of various factors in differing proximity to an individual. The behavior that a person displayed could be influenced by factors residing in any of four levels. Starting most proximal to the individual in the microsystem level, people are influenced by their immediate settings, such as school or home, and the roles in which they fulfill, such as a

child, parent, or friend. The microsystem also includes individual characteristics of a person. The next proximal level is the mesosystem, which contains a set of relationships with people located within a person's microsystem (Bronfenbrenner, 1977). For sport parents, this could include their child, coaches, referees, other children on the team, and other parents involved in the sport.

Moving further from the individual and mesosystem, the exosystem encompasses "specific social structures, both formal and informal" (Bronfenbrenner, 1977, p. 515) that are not necessarily directly in contact with an individual but nonetheless have an impact on one's behavior. This can include sport organizations at local, state, and national levels, the media, broader social networks, and league structure. Finally, the most distal level to the individual is the macrosystem, which consists of culture, norms, values, and other societal level factors. These factors can be both formal (e.g., regulations governing what protective equipment young athletes are required to wear in hockey or minimum depths for swimming pool dive tanks) and informal (e.g., shaking hands at the end of game, having parents coach their young children), passed, often uncritically, from one group of parents to the next (Bronfenbrenner, 1977).

Since Bronfenbrenner's initial model, other researchers have used ecological models to examine the many complex factors that influence individual behaviors in different contexts including, physical activity (Spence & Lee, 2003; Thul & LaVoi, 2011), health-related behavior (Sallis, Owen, & Fisher, 2008), and coaching (LaVoi & Dutove, 2012; LaVoi, 2016). Since various levels are involved, the full context in which a person operates is considered when attempting to understand behavior—specifically for the purpose of the present study, parental sideline behavior in youth sport contexts.

Exosystems and macrosystems can have a direct impact on a person's behavior, and using an ecological model is useful for explaining behavior that occurs within social settings. While general models exist (such as Spence & Lee, 2003), more specific models are more useful for guiding future research (Salmon, Spence, Timperio, & Cutumisu, 2008).

Spence & Lee (2003) argue that changes done at any level in the model can impact the individual, meaning that a population change, such as a policy change, can impact many parents regardless of whether or not they want to be involved in a behavior change program. Additionally, when an ecological perspective is taken it is possible to view behavior, in part, as a product of the situational and personal factors, rather than solely placing attribution to the individual (LaVoi & Dutove, 2012), which may make it easier to create change when individuals are not being blamed directly for poor behavior. Taking an intersectional, multi-factor approach can prove problematic however, because the larger cultural factors that affect people are not necessarily easy to change (Sallis et al., 2008). For example, gender stereotypes about how mothers and fathers *should* act (i.e., what is gender normative) on youth sport sidelines or gendered roles mothers and fathers should play in their child's sport experience may not be easily changed.

**Using an ecological model to understand sport parent behavior.** Given the potential for ecological models to aid in understanding behavior that takes place in a social context, a model for understanding influences on youth sport parent behavior is proposed. As demonstrated in the previous section, many researchers, especially in the last ten years, have examined *how* parents act on the sidelines. Considerably less attention however, has been paid to understanding *why* parents act in these ways and

what influences their behavior. Using an ecological model, gaps in current research and areas for potential for change can be identified, which provide in part, rationale for the current study.

An ecological model is appropriate for environments that are inherently social, that is, contexts in which an individual's behavior can be influenced by a variety of factors both in and out of a person's control. Youth sport falls into this type of environment, as it includes many stakeholder groups (e.g., athletes, coaches, administrators, other parents, referees) who potentially influence a parent's behavior (Omli & LaVoi, 2012) and operate within a larger set of cultural norms and rules. Ecological models are developmental models, but that does not mean they should be limited to children or adolescents. Parents go through a developmental process as they become sport parents and as their children progress through different stages of sport participation (Côté, 1999).

Just as stressors for parents change throughout their child's athletic development (Harwood & Knight, 2009a), parents also change their behaviors in response to the actions of their child, other parents, and changing social, personal or situational circumstances (Clarke & Harwood, 2014; Wuerth, Lee, & Alfermann, 2004), even within the first year of becoming a sport parent (Dorsch, 2013). Together these experiences shape how mothers and fathers act as sport parents, and an ecological model provides a framework to help examine and further understand parental behaviors within particular sociocultural context—in this case youth sport. Using an ecological model to understand what influences sport parent behavior can pinpoint specific places to change parent behavior without having to necessarily create an intervention that targets every parent or every situation in a sport organization or context.



One previous study used an ecological model to conceptualize parent behavior (Holt et al., 2008), but focused on only the mesosystem and exosystem. Researchers looked at how parents' behavior reflected empathy toward their child, whether behavior depended on where parents sat in proximity to other parents, and whether league policies that penalized fans who displayed poor behavior influenced actions. Holt's research team argued that future research should examine all levels of the ecological model. The model proposed here is a response to Holt and colleagues' call as it includes research at all levels of the ecological model and can help researchers to identify areas where more research is needed.

A previous motivational model based on emotion regulation and situational factors, proposed by Goldstein and Iso-Ahola (2008), found some predictors for poor parental behavior on the sidelines, such as parenting style. While this model is helpful in predicting some behavior, only trait and situational motivation were seminal predictors. This design does not allow for the complexity of contextual factors to be examined, as can happen by employing a complete ecological model.

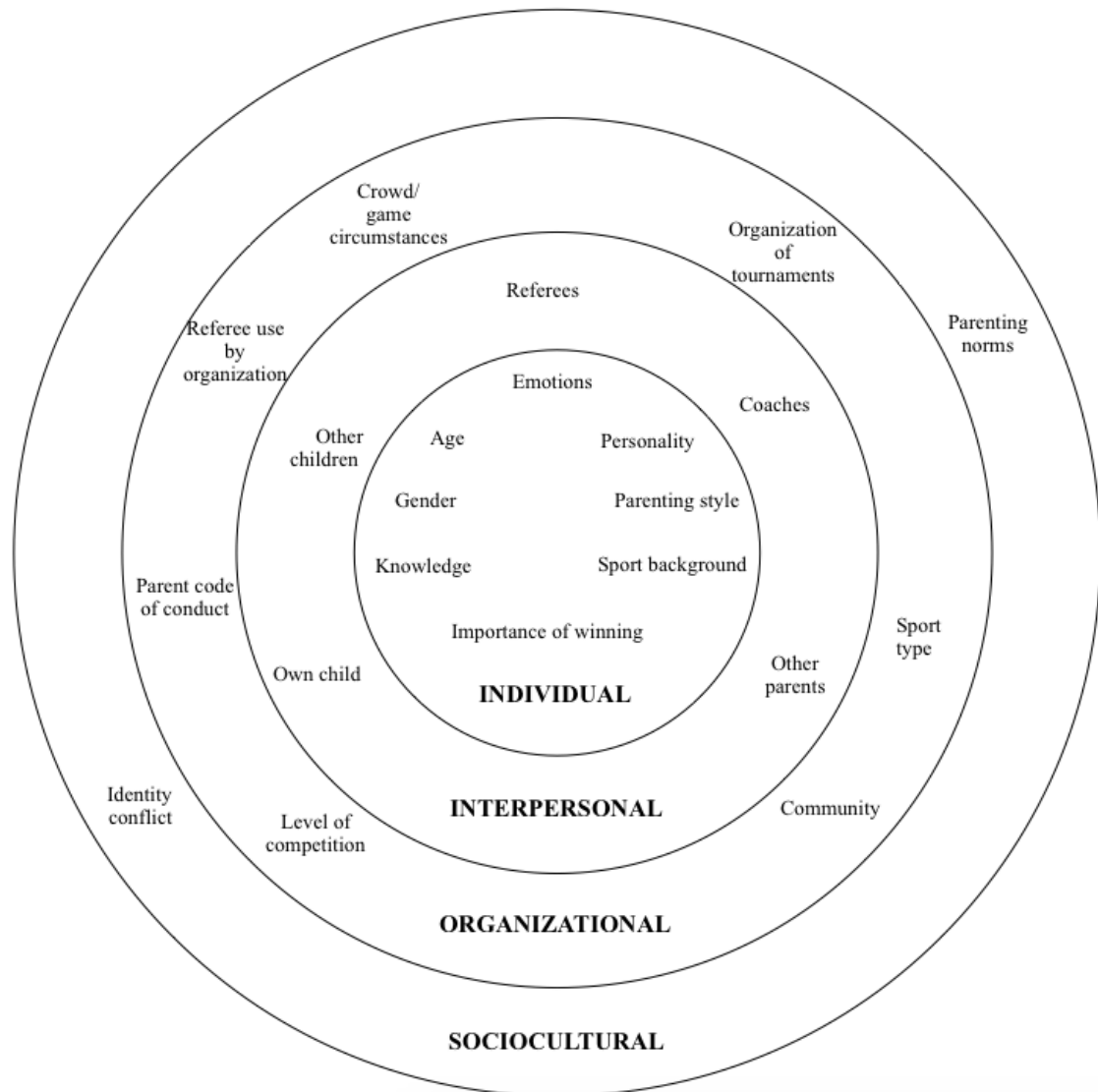
Additionally, in a study of sport-related violence, including poor parent behavior, Fields, Collins, and Comstock (2007) concluded that an ecological model was necessary moving forward, as it would inform interventions and future research by including individual, interpersonal, institutional, community, social, and policy factors. Until recently, a lack of a critical body of sport parent research prohibited the possibility of populating a sport parent ecological model with evidence-based knowledge. Given the plethora of sport parent research conducted in the last ten years in particular, placing the current and growing body of literature into a theoretical model provides utility and guides

application. The proposed ecological model—the Sport Parent Sideline Behavior Model—will incorporate and build on existing research parent behavior.

**Sport Parent Sideline Behavior Model.** In order to collect research on the influences of parental sideline behavior, a systematic review of research was performed. Following previous research reviews (Gilbert & Trudel, 2004; Goodger, Gorely, Lavallee, & Harwood, 2007; LaVoi & Dutove, 2012), two database searches were performed in Google Scholar, SPORTDiscus, PsycINFO, and Physical Education Index. Using the search terms *parent, sport, and child OR youth* for the first search and *sport, parent, and behavior OR behaviour* for the second search. The results were examined to determine potential relevance—meaning that the result described influences or antecedents of youth sport parent sideline behavior upon examination of the abstract or summary. As in previous reviews, conference proceedings, dissertations, and theses were not included (Gilbert & Trudel, 2004), but articles, books, and book chapters were considered. Only references published in English were used. The original search was performed in the spring of 2013 with additional searches in summer 2014 and early 2016 to check for new research. One new article was added from the second search and two new articles from the third search. No limits were set for year of publication given that this is a relatively young field of study. Table 1 includes a complete list of references as well as the level of the ecological model the results were placed and what factors were present in the study influencing parent sideline behavior.

The following section provides a detailed description of the research in each level of the ecological model. Instead of using Bronfenbrenner's (1977) labels, this section will use labels consistent with recent research using the ecological model (LaVoi & Dutove,

2012), as these labels are more intuitive and provide a clearer description of the research presented in each level. The labels used, from most proximal to most distal to the parent, are individual, interpersonal, organizational, and sociocultural context. An overview of the Sport Parent Sideline Behavior Model is presented in Figure 1.



*Figure 1.* Sport Parent Sideline Behavior Model.

Table 1

*Alphabetical List of References Included in the Sport Parent Sideline Behavior Model*

Author(s)	Year	Level	Factor
Blom & Drane	2008	Individual	Gender
		Interpersonal	Gender of child
		Organizational	Level of competition Sport type Crowd/game circumstances
Bowker et al.	2009	Individual	Gender
		Interpersonal	Gender of child
		Organizational	Level of competition
Coakley	2009a	Sociocultural	Parenting norms
Coakley	2009b	Sociocultural	Parenting norms
Crossman	1986	Individual	Age
Dorsch, Smith, & McDonough	2009	Individual	Gender
			Experience
		Interpersonal	Temperament of child Actions of other parents
		Organizational	Community size Sport type
Dorsch, Smith, Wilson, & McDonough	2015	Organizational	Sport type Crowd/game circumstances
Goldstein & Iso-Ahola	2008	Individual	Parenting style
Gould, Lauer, Rolo, Jannes, & Pennisi	2006	Individual	Emphasis on winning
Harwood, Drew, & Knight	2010	Organizational	Parent code of conduct
Hennessy & Schwartz	2007	Individual	Gender
			Personality
		Organizational	Level of competition
Holt, Tamminen, Sehn, Black, & Wall	2008	Interpersonal	Child's behavior
		Organizational	Crowd/game circumstances Parent code of conduct
			Parenting style
Holt, Tamminen, Black, Mandigo, & Fox	2009	Individual	Parenting style

Author(s)	Year	Level	Factor
			(continued)
Jeffery-Tosoni, Fraser-Thomas, & Baker	2015	Individual	Gender
		Interpersonal	Actions of child, coach, referee, other parents
Knight & Holt	2013	Interpersonal	Child's performance and behavior
			Other children's attitudes and behavior
			Actions of other parents
		Organizational	Organization of tournaments
LaVoi & Miles	2008	Organizational	Level of competition
Meân & Kassing	2007	Sociocultural	Conflicting identities
Omlî & LaVoi	2009	Interpersonal	Age of child
Omlî & LaVoi	2012	Interpersonal	Actions of child, coach, referee, other parents
Omlî, LaVoi, & Weise-Bjornstal	2008	Individual	Emotions
Randall & McKenzie	1987	Individual	Knowledge
		Interpersonal	Age of child
		Organizational	Community
			Sport
			Crowd/game circumstances
Wann	1993	Individual	Emotions
Wiersma & Fifer	2008	Individual	Knowledge
			Emotions
		Interpersonal	Age of child
			Actions of others
		Organizational	Community
			Referee use

**Individual.** Starting with the individual level, several studies have identified factors within this level that influence sport parent sideline behavior. The individual level includes influences from individual characteristics and the immediate setting and roles of a person (Bronfenbrenner, 1977). In terms of influences on sport parent behavior, this level includes age, gender of parent, sport background, knowledge about the sport, level of emotion, personality, the importance of winning, and parenting style. Age was found to influence the number of comments made by parents on the sideline (Crossman, 1986)—20 to 39 year olds were the most vocal group of spectators, with 20 to 24 year olds being the most verbally positive toward coaches and athletes and 30 to 39 year olds being the most verbally negative toward referees and officials. The gender of the parent had conflicting results in whether it was influential in sideline behavior. Bowker et al. (2009), Dorsch, Smith, and McDonough (2009), and Hennessy and Schwartz (2007) found that gender of parent did influence sideline behavior with fathers being more likely to consider yelling were the most vocal group of spectators, whereas Blom and Drane (2008) found that gender did not influence behavior.

When parents were interviewed about being socialized into the youth sport parent role, their own sport experiences influenced their behavior, including having an emotional connection to the sport and projecting expectations on their child or living vicariously through their child (Dorsch et al., 2009). A parent's knowledge about a sport had conflicting results, with one study finding that more knowledge led to less comments from the sidelines (Randall & McKenzie, 1987), and another study finding that more knowledge increased the number of comments, but only in number of comments directed

to referees (Wiersma & Fifer, 2008). The amount of emphasis placed on winning was found to influence tennis parents, as those who thought winning was more important were more likely to criticize their child in an attempt to motivate them, which can be counterproductive in encouraging growth and development in their sport (Gould, Lauer, Rolo, Jannes, & Pennisi, 2006).

Emotions appeared to be an important factor in determining behavior. Parents who became caught up in the moment were more likely to act inappropriately on the sidelines (Wiersma & Fifer, 2008). Parents have an emotional connection to their child, which can make watching their child perform a stressful experience and lead to inappropriate behavior (Omli, LaVoi, & Wiese-Bjornstal, 2008). Additionally, because parents have an emotional attachment to their child, they are, in a way, highly identified fans. Highly identified fans are those who have a high emotional attachment to a particular team, including interest in the team's performance, involvement in some way with the team, and view the team as representing them (Wann, 1993). In the case of a child's sport, it is clear that a parent could easily be a highly identified fan, given that the parent is typically interested in the child's (and team's) performance, is usually involved in some capacity with the team, and would likely view their child as representing them. Highly involved fans are more likely to display aggressive behavior (Wann, 1993).

Parenting style has been linked to sideline behavior in two different studies. Goldstein and Iso-Ahola (2008) found that parents who were control-oriented were more likely to become ego-defensive, which led to increased anger and aggression. Parents who were autonomy-oriented were less likely to become ego-defensive, but when these

parents became ego-defensive, the likelihood that they became angry or aggressive was the same as control-oriented parents. When children were asked, Holt, Tamminen, Black, Mandigo, and Fox (2009) found that parents with a more controlling parenting style, such as those who forced their children to do extra practice or did not allow their child to have input into decisions, made more inappropriate comments than parents with a less controlling parenting style.

An examination of characteristics that increased the likelihood of aggressive acts at Little League baseball games found that spectators with trait hostility (i.e., those who feel they were treated unjustly and act poorly toward those who were perceived to cause the injustice) were more likely to feel like they were treated unjustly and therefore to commit aggressive acts (Hennessy & Schwartz, 2007). Trait anger refers to experiencing anger increasingly often in a particular situation, and can be a predictor of aggressive behavior. Parents with higher trait anger were more likely to respond to others who were angry, and those with a vengeful attitude were more likely to humiliate umpires.

***Interpersonal.*** Within the interpersonal level, there was more research evidence to demonstrate the influence of factors on parent behavior than at the individual level. This level includes the relationships with people/stakeholders/social agents in the individual level of a sport parent (Bronfenbrenner, 1977), such as their child, coaches, referees, and other parents. As the child is a crucial part of a parent's interpersonal level, we will start by examining the influence of the child, followed by the influences of other adults such as coaches and other parents.



*Influence of child.* The sex of the child was found not to influence parent behavior in one study (Bowker et al., 2009), however Blom and Drane (2008) found that girls 6-14 years old received more comments during games than boys of the same age (1 comment per minute for girls compared to 1 comment per 1.6 minutes for boys). Also, comments to girls were significantly more likely to be positive (55.4% of all comments were positive) compared to boys (48.1% positive), and there was no significant difference between negative comments for boys (32.1%) and girls (32.2%). Another study found that although sex may play some role, many parents found that child's temperament had more influence on their behavior (Dorsch et al., 2009). Emotional mirroring (Dorsch et al., 2009) was a strategy used by parents in which parents tried to act based on how they thought their child felt, which influenced self-reported parental behavior. Parents also reported trying to be empathetic to their child's emotions when on the sidelines (Holt et al., 2008).

The age of the child also was a factor that elicited mixed results. Randall and McKenzie (1987) found that the younger children were, the more yelling that occurred and some participants in Wiersma and Fifer's (2008) study agreed, but one study (Omli & LaVoi, 2009) found that coaches, athletes, and parents perceived that background anger increased as children aged. The most prevalent forms of background anger in this study were yelling at the referee and coaching from the sidelines. The final factor directly related to the child was their performance. In some cases, parents found it hard to control their behavior when their child played poorly or had a problem while participating (Omli

& LaVoi, 2012; Wiersma & Fifer, 2008) and found that much of their behavior was reactive to their child's on-court behavior (Knight & Holt, 2013).

*Influence of other adults.* When asked what made sport parents angry during youth sport events, parents cited the actions of others, including perceived incompetence or injustice by the coach or referee, or a lack of caring by either athletes, coaches, or other parents (Knight & Holt, 2013; Omli & LaVoi, 2012). Examples included unsportsmanlike conduct by athletes or coaches, yelling at athletes, coaches, or referees, arguments with other parents, unfair parental involvement, and verbal or physical fighting. Similarly, when parents felt coaches were being unfair (e.g., not giving equal playing time or not letting everyone try positions), referees were making bad calls, or coaches were explicitly telling children to play rough, the parents were more likely to exhibit poor behavior (Jeffery-Tosoni et al., 2015; Wiersma & Fifer, 2008).

When asked how their behavior and cognitions had changed through their experiences with youth sport, some parents revealed where they learned about proper sideline behavior (Dorsch et al., 2009). Parents spoke of learning "bleacher behavior" (p. 455) from other parents, and in turn made sure to manage their image by "presenting a 'public face'" (p. 457) when they were on the sidelines. They also learned about good parent behavior based on feedback from their children and spouse.

***Organizational.*** The organizational level contains factors related to networks and the structural level of youth sport. These factors can be both formal and informal, and may or may not be in contact directly with an individual but still have an influence on parents in some form (Bronfenbrenner, 1977). Factors that influence parent behavior on

youth sport sidelines include the organization of games, level of competition, the community, the type of sport, the crowd, league rules and policies for spectator behavior, and perceived experience of referees. Parents sometimes acted poorly when they perceived a tournament to be poorly organized or when the focus was solely on gaining points with apparent disregard for developmental level (Knight & Holt, 2013). The competitive level of the athletes was one factor that influenced parents' behavior (Bowker et al., 2009). In recreational sports, there tended to be less yelling, especially at officials and coaches (Blom & Drane, 2008), which is logical since the outcome is likely to be less important in these situations. Additionally, LaVoi and Miles (2008) found that background anger occurred more frequently on the sidelines of travel teams than in house teams. More aggression may be witnessed in competitive contexts (Hennessy & Schwartz, 2007) and may vary based on what a particular community feels to be a more competitive sport (Wiersma & Fifer, 2008). The community itself may influence parent behavior as well, as some parents noted that they thought the sidelines would be different depending on whether it was a large or small community (Dorsch et al., 2009), however socio-economic status did not appear to have any influence on sideline behavior (Randall & McKenzie, 1987).

The type of the sport being played appeared to influence the behavior of parents on the sidelines. Soccer, which has more flow and fewer "critical play events" than sports like baseball, were found to have less comments from parents (Randall & McKenzie, 1987, p. 209). Dorsch et al. (2015) found that different sports elicited different behavior from parents on the sidelines, but the small sample size and wide range of sports limited

the generalizability of the observations. Some parents were more verbal during outdoor sports compared to indoor sports, whereas other parents were more verbal during individual sports compared to team sports.

The time of the game also influenced the amount of comments from the sidelines. When teams were playing, there were more comments than when play was stopped (Blom & Drane, 2008). This can be problematic because it is difficult for children to learn skills when they are bombarded with instruction, and is counter to good teaching strategies that allow a child to practice and then receive instruction. Finally, whether it was a team or individual sport influenced how parents acted on the sidelines (Dorsch et al., 2009) in that poor performance by their child could be “buffered” (p. 463) to an extent by good team performance.

The crowd played a role in parent behavior in different ways. A more emotionally intense crowd could elicit worse behavior from parents based on several factors, including the score, the game circumstances (i.e., beginning, middle, end), and where the parents were located in proximately to each other (Blom & Drane, 2008; Holt et al., 2008). Despite some organizations which required parents to sit away from the opposing team’s parents, disputes sometimes still occurred between parents on the same team (Holt et al., 2008). Additionally, parents were further from the sidelines in some sports than others, which seemed to influence their behavior by decreasing the number of comments made during games (Randall & McKenzie, 1987). In general, behavior tended to be reactive to what was happening in the game, rather than premeditated.

While the usefulness of organizational, team or programmatic parental codes of conduct have been questioned (Wiersma & Sherman, 2005), in some situations these codes seem to encourage and promote good behavior. In a soccer club in Canada, referees had the option of giving red cards to parents for bad behavior, and the incidences of poor behavior were lower than expected by researchers (Holt et al., 2008). At a soccer academy in the United Kingdom, parents were more likely to behave because there was a strict code of conduct and severe consequences for breaking school policies (Harwood, Drew, & Knight, 2010). The final factor in the organizational level was related to way a league used referees. If referees were young or immature, parental behavior seemed to be more out of control. While this may appear to be an interpersonal variable, decisions about who is assigned and allowed to referee games (e.g., older athletes refereeing for younger athletes in the same league) is made by administrators and therefore can fall into the organizational level. Additionally, parents were more likely to exhibit poor behavior if referees were paid, as it was assumed that they should be more competent (Wiersma & Fifer, 2008).

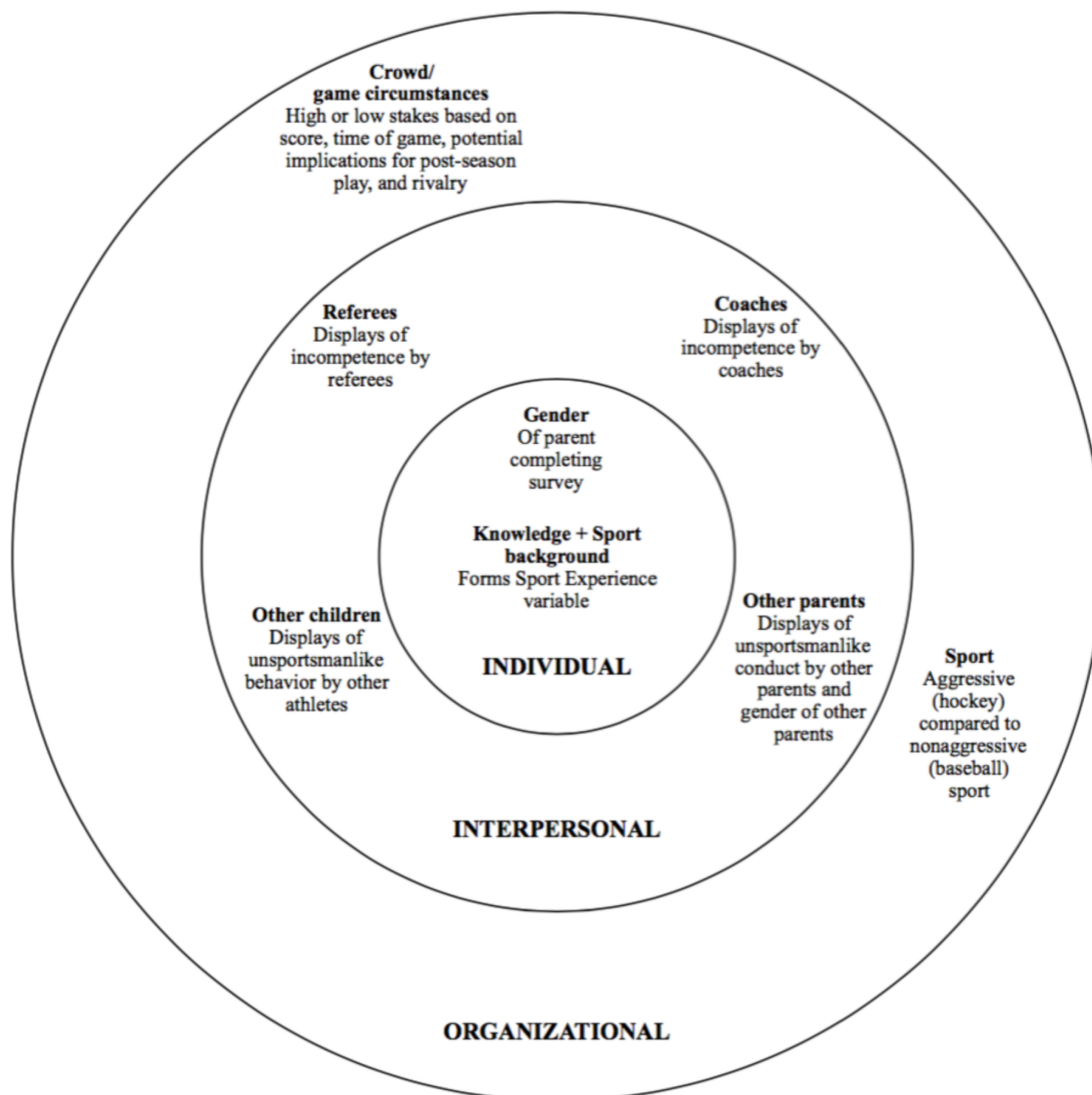
***Sociocultural context.*** The sociocultural context encompasses norms, values, and culture that an individual is operating within. These formal and informal factors are at the societal level (Bronfenbrenner, 1977) and can be passed from one group of parents to another through interactions between parents. Societal norms around what it means to be a good parent, as well as the identity of sport parents are factors that influence parent behavior in youth sports. Only one study to date has examined sociocultural context in relation to parent sideline behavior influences (Meân & Kassing, 2007). This study

examined the conflicting identities of sport parents and how that impacted their behavior on the sidelines. Behavior that is normal for parents or normal for places where children exist (e.g., caring for your child, not yelling at children when they are learning new skills, not swearing in front of children, valuing participation and effort over winning, and so on) is not necessarily the same behavior that is found in sporting contexts (e.g., yelling at officials or athletes, ridiculing opponents, valuing winning above all, and so on). Meân and Kassing (2007) found that when parents had a conflict in identity in a sport context, it was common for the sport discourse to be more important, thus contributing to poor sideline behavior.

While not specifically examining sideline behavior, Coakley (2009a, 2009b) argued that parent behavior in sport was related to cultural norms about parenting. Since parents are accountable for what their children do at all times, a child's successes and failures are perceived to also be successes and failures of the parent. Additionally, sport is a public space that is highly valued, therefore success and failure in this context are important, and "as long as parental moral worth is linked to the achievements of their children ... parents will be deeply involved in and concerned about youth sports" (Coakley, 2009b, p. 133).

**Youth sport parents as spectators.** As laid out in the previous section, there is some research evidence that helps in understanding, and perhaps predicting, why parents act in various ways on youth sport sidelines—however this model is far from complete and many gaps exist in what is known to influence sport parent behavior on youth sport sidelines. Specifically, parents' perceptions about the behavior occurring on youth sport sidelines has yet to be examined, including the influence of individual, interpersonal, and

organizational factors on these perceptions. The general aggression model (Anderson & Bushman, 2002) presented previously posits that both personal and situational factors interact to influence behavior, which aligns with the ecological model in that contextual and individual factors need to be considered when examining behavior. Personal factors from the general aggression model, including gender of parent and previous sport experience, fit into the individual level of the ecological model. Similarly, situational factors such as whether it is a high or low stakes situation, what sort of occurrence happens (e.g., referee misses a call, unsportsmanlike conduct by an athlete), and the type of sport, are part of the interpersonal and organizational levels of the ecological model. Together these theories highlight gaps in current knowledge about sport parent sideline behavior (see Figure 2). Given what is known about influences on parent sideline behavior in youth sport and spectator behavior outside youth sport and through this comprehensive review of literature, it is apparent that more research is needed to better and more clearly understand influences on parents from the perspective of parents. While some of the factors explicated herein are included in previous research, results have been sparse and inconclusive and the perspective of parents has often not been considered or included. Researchers have asked children about their preferences for parental behaviors, have observed what parents do on sidelines, and have asked parents their perceptions about how often background anger behaviors occur on youth sport sidelines, but have yet to ask parents directly about their preferences for sport parents sideline behaviors or examined whether those preferences are influenced by personal or situational factors.



*Figure 2.* Sport Parent Sideline Behavior Model with variables from current study identified

### **Purpose**

The overarching purpose of this study is to better understand sport parent sideline behavior from the perspective of sport parents. Data obtained from parents of youth ice hockey and baseball players will be used to determine the frequency and



acceptability of poor sport parent/spectator sideline behaviors and whether personal (gender of parent and sport experience) and situational factors (the stakes, type of occurrence, and type of sport) change sport parents' perceptions about acceptability of, or willingness to, display poor sideline behaviors.

### **Significance of Study**

The significance of this study is multifaceted: the theory and research used to design the study, the examination of unknown personal and situational factors, the focus on sport parents' perceptions, and the potential applications for the results of the study make it a unique study and contribute to current gaps in knowledge. Holt and Knight (2014) argued it was important for future sport parent research to move beyond simply *describing* behavior and focus on *why* certain behaviors are happening in youth sport. By asking parents about not only frequency but acceptability, in this study I will be considering the context in which parents are acting and use this information to better understand why parents may be acting in certain ways. In short, through this study I am answering the call of Holt and Knight by using a more complex theoretical model and studying multiple variables simultaneously.

By using the ecological model and the general aggression model in combination, personal and situational factors that are relevant to further understanding of sport parent sideline behavior, that have either not been examined in previous research or have had conflicting results, have been identified. The foundational framework of this study lies in two different bodies of research: sport parent sideline behavior research largely conducted in sport psychology, and spectator aggression research which is predominately

conducted in sport psychology and sport management. To date, no researcher has combined these two disparate, yet related, bodies of research to better understand youth sport parent sideline behaviors. In this study I am utilizing both bodies of research by placing personal and situational variables detailed by the general aggression model (Anderson & Bushman, 2002) into an ecological model of youth sport parent sidelines behavior (Bronfenbrenner, 1977; see figure 2), to better understand factors that influence sport parent sideline behaviors.

In this study I am examining the influence of a set of personal and situational factors that remain under-examined in the context of youth sport. The personal level factors included in this study are gender and previous sport experience, and while both these factors have been previously examined at the youth sport level, the results from these studies are inconsistent. Thus, it is important to include these factors in this study to better ascertain significance. The situational factors included in this study (type of sport, the stakes, and type of occurrence) have been studied to some extent in spectator research at collegiate and professional levels, but have not yet been examined at the youth sport level. It is important to study personal and situational factors that influence sport parent behavior at the youth sport level because as specified earlier there are many potential benefits to youth sport participation from a physical, mental, and social health perspective, yet many children and youth are unable to realize these important benefits due, in part, to poor parent sideline behavior (Hedstrom & Gould, 2004; Weiss & Wiese-Bjornstal, 2009).

There is some evidence about what sorts of behaviors occur on youth sport sidelines (e.g., Blom & Drane, 2008; Bowker et al., 2009; Kidman et al., 1999), but there are no studies in which parents have described or reported their perspectives on the acceptability of poor sideline behaviors. Data do exist pertaining to how children prefer and do not prefer parents to act on youth sport sidelines (Omli & Wiese-Bjornstal, 2011), but no complementary data on parents' perceptions of acceptable/unacceptable sport parent sideline behaviors in youth sport exists. This gap includes sport parent perceptions of how often poor behavior occurs, how acceptable these behaviors are, their own willingness to consider displaying poor behavior in specific situations, and whether their acceptability beliefs of poor behavior changes based on the situation, as well as whether these perceptions are different when considering mothers and fathers separately. Researchers have argued that it is important to examine what is considered good and poor behavior in *specific* sports, given that the context of a certain sport may lend itself to different types of behavior and there could be a difference between what is acceptable for parents in one sport compared to another (Gould et al., 2008). This study is looking to ascertain acceptable and unacceptable behaviors in two specific sports, baseball and ice hockey, which will contribute to our understanding of behavior in two sport-specific contexts.

Understanding the perceptions of parents is important for not only better understanding youth sport sidelines and adding to the current body of knowledge about sport parents and spectator aggression, but also has practical implications. The results of this study can be utilized to help stakeholders and sport educators in youth sport to better

understand the circumstances under which parents act poorly in some sports, which may in turn lead to strategies for improving sideline behavior and potentially predicting how parents will act in certain situations. Improving parental behavior on youth sport sidelines improves the quality of the sport experiences for everyone—the most important of whom are the children.

### **Research Questions**

Given the purpose and significance, this study is guided by the following overarching question: Do personal and situational factors influence youth sport parents' report of the frequency of their own behaviors, perceptions of the frequency of other parents' behaviors, and the acceptance of these behaviors on youth sport sidelines?

Specifically, the following questions will be examined:

1. Does gender influence youth sport parents' report of the frequency of their own behavior and their perceptions of acceptability of other parents' behaviors on youth sport sidelines?
2. Do youth sport parents perceive a difference between mothers and fathers when reporting the frequency and acceptability of other parents' behaviors on youth sport sidelines?
3. Does sport experience of the youth sport parent influence parents' report of the frequency of their own behaviors and the acceptability of other parents' behaviors on youth sport sidelines?
4. Does sport type influence youth sport parents' report of the frequency of their own and other parents' behaviors and the acceptability of other parents' behaviors on youth sport sidelines?
5. Do the stakes influence youth sport parents' report of the frequency of their own and other parents' behaviors and acceptability of other parents' behaviors on youth sport sidelines?
6. Does the type of occurrence influence youth sport parents' report of the frequency of their own and other parents' behaviors and the acceptability of other parents' behaviors on youth sport sidelines?

Based on these research questions and the existing literature on sport parent and spectator behavior, the following hypotheses will be tested in the current study.

## Hypotheses

**Personal factors.** The personal factors that may influence sport parents' perceptions of sideline behavior in youth sport include the gender of the parent and the parent's own previous experience in the sport. The hypotheses proposed here are in response to research questions 1-3.

***Gender of parent.*** The gender of parent variable is important to examine in the context of this study. No studies to date have tested whether the gender of the parent influences the frequency of self- or other-reported poor behaviors on youth sport sidelines. In much of sport parent research, parental influence is considered a single variable, rather than considering the influence of mother and father separately. There is a small amount of evidence generated mostly by Babkes Stellino and colleagues, that mothers and fathers influence their children in different ways in sport and therefore should not be collapsed into a single variable (LaVoi & Stellino, 2008). In hockey, fathers were found to have more influence and involvement in their sons' sport experience compared to mothers. Additionally, good and poor behaviors were predicted differently depending on the influence of mothers and fathers. When players perceived their mother as worrying about them failing, they were likely to act ungraciously both on and off the ice, and father influences tended to predict more poor behaviors than mother influences (LaVoi & Stellino, 2008).

In a study done with youth soccer players, children who perceived their mothers to be positive role models in an exercise context and to have positive beliefs about their ability to play soccer competently were more likely to desire optimal challenges, use

internal criteria when judging ability, enjoyed soccer participation more, and perceived themselves as more competent (Babkes & Weiss, 1999). Children who perceived their fathers as having increased interest in their sport reported similar responses as with their mothers (more likely to desire optimal challenges and so on), but additionally reported increased motivation. In another study, children reported perceiving more stress from fathers' involvement in their sport than mothers involvement (Stein et al., 1999). Given the potential for differing influence of mothers and fathers in other aspects of ice hockey and baseball, it is important that parental gender differences in sideline behaviors also be examined.

As seen in the Sport Parent Sideline Behavior Model, there is some indication that gender influences behaviors on youth sport sidelines, but there are mixed results. Blom and Drane (2008) found no difference in behavior between mothers and fathers, however other studies did report more poor behaviors from fathers compared to mothers on sidelines (Bowker et al., 2009; Dorsch et al., 2009; Hennessy & Schwartz, 2007; Jeffery-Tosoni et al., 2015). Based on this, for the gender of parent variable I am hypothesizing that fathers will be more likely to consider displaying poor behaviors and be more accepting of poor behaviors by other parents than mothers. Additionally, these hypotheses are supported by research showing males as more willing to consider committing aggressive acts than females (Wann et al., 2003). The following question and hypothesis related to the gender of the parent is proposed:

*Research Question 1: Does gender influence youth sport parents' report of the frequency of their own behavior and their perceptions of acceptability of other parents' behaviors on youth sport sidelines?*

*Hypothesis 1:* Fathers will be significantly more likely to report displaying poor sideline behaviors than mothers.

In addition to the gender of the parent answering the survey, participants will also be asked to reflect on the frequency and acceptability of behaviors of other mothers and fathers. Using the same research on gender stated in hypothesis 1, it would seem likely that parents would report more poor behavior from other fathers and be more accepting of poor behavior by fathers compared to mothers. The following question and hypotheses related to gender of other parents are therefore proposed:

*Research Question 2:* Do youth sport parents perceive a difference between mothers and fathers when reporting the frequency and acceptability of other parents' behaviors on youth sport sidelines?

*Hypothesis 2a:* Parents will report fathers as being significantly more likely to display poor sidelines behaviors than mothers.

*Hypothesis 2b:* Parents will be significantly more accepting of fathers' displays of poor behaviors than mothers' displays of poor behaviors.

***Sport experience.*** In sport spectator research, fandom, identification, or attachment are typically measured to determine if and how fans are engaged with the sport and team under investigation. In this study however, it is not suitable to measure fandom, identification, or attachment because these measures are linked to a sport team. In the case of spectating youth sport, it is likely that all parents will be fans, be identified, and be attached to the team because of their child, and would therefore score high on any of the aforementioned measures. To differentiate between parents with high and low sport experience, a new measure will be developed and tested. This measure, "sport experience," will include playing and coaching experience and sport knowledge.

Fans who are more highly identified with a team are more likely to consider committing acts of aggression (Wann, Carlson, et al., 1999; Wann et al., 2003) and part of identification with a team is being a fan of that particular sport. Parents who have played a sport at higher levels (i.e., high school or higher) are likely to be more knowledgeable and identified with that sport, therefore sport experience at a higher level may be factor that will influence sideline behavior. I am hypothesizing that parents who have high sport experience in the sport their child plays will respond differently than parents who have low sport experience in that sport.

I am making a non-directional hypothesis because while identification with the sport may indicate that these parents will be more likely to display or accept poor behaviors, it is possible that the high experience group would be better educated about the sport and therefore know from experience that certain behaviors are distracting or distressing to players and avoid these behaviors. Previous research has produced conflicting results—some researchers found that parents with more sport knowledge made fewer comments from the sidelines (Randall & McKenzie, 1987) and other researchers concluded that more comments were directed to referees by parents with more sport experience (Wiersma & Fifer, 2008). Based on the small amount of research and inconsistent results, the following questions and hypotheses are presented:

*Research Question 3:* Does sport experience of the youth sport parent influence parents' report of the frequency of their own behaviors and the acceptability of other parents' behaviors on youth sport sidelines?

*Hypothesis 3a:* There will be a significant difference in the self-reported display of poor sideline behaviors between sport parents with high sport experience and sport parents with low sport experience.



*Hypothesis 3b:* There will be a significant difference in acceptability for other parents to display poor sideline behaviors between sport parents with high sport experience and sport parents with low sport experience.

**Situational factors.** There are three situational variables that I hypothesize will influence parents' perceptions about how frequently they will report witnessing poor sideline behaviors, how willing they are to consider personally displaying these behaviors, and how acceptable they think it is for other parents to display these behaviors. The three situational factors to be examined are the type of sport, the stakes, and the type of occurrence. The following hypotheses are proposed for research questions 4 to 6.

***Type of sport.*** Although there are many ways to categorize sport, in previous research on spectator behavior sports are categorized in three ways that are useful for the purpose of the current study: team/individual, aggressive/nonaggressive, and stylistic/nonstylistic (Wann et al., 2008; Wann, Schrader, et al., 1999). Team sports are those that have at least two teammates working together on the playing field simultaneously. Aggressive sports are classified as sports where “the action involve[s] a high level of physical contact designed to injure the opponent(s) for either hostile or instrumental reasons” (Wann, Schrader, et al., 1999, p. 123). Stylistic sports include sports that winners are determined based on a subjective scoring (e.g., gymnastics, figure skating), compared to sports where an objective measure (e.g., goals scored, time to complete a race) is used to determine the winner. Previous sport parent sideline behavior research has centered largely on team sports like soccer, hockey, and baseball/softball (e.g., Blom & Drane, 2008; Bowker et al., 2009; Holt et al., 2008; Jeffery-Tosoni et al., 2015; Randall & McKenzie, 1987) and therefore the decision was made to use team

sports for this study as well since results were not conclusive on the differences between sports. In previous studies with more than one sport, it was difficult to compare between sports because there were small sample sizes (Dorsch et al., 2015) or the comparison was not explicit (e.g., Omli & Wiese-Bjornstal, 2011).

For this study, two sports were chosen that only differed in one of the three categories: aggressive/nonaggressive. Based on this definition, ice hockey was chosen as the aggressive sport and baseball was chosen as the nonaggressive sport. Both sports are team sports and are nonstylistic. This will allow for comparison between two different type sports, but will also limit the potential for confounding factors by having sports that are otherwise similar. There is evidence to suggest that on the sidelines of aggressive sports, such as ice hockey, spectators are more willing to act poorly compared to spectators at nonaggressive sports like baseball because they are viewing an aggressive sport (Anderson & Bushman, 2002; Coakley, 2009a; Jamieson & Orr, 2009; Ward Jr., 2002). Therefore, the first set of questions and hypotheses for this set of variables are:

*Research Question 4:* Does sport type influence youth sport parents' report of the frequency of their own and other parents' behaviors and the acceptability of other parents' behaviors on youth sport sidelines?

*Hypothesis 4a:* Sport parents will perceive poor sideline behaviors by other parents as occurring significantly more frequently in ice hockey than baseball.

*Hypothesis 4b:* Sport parents will be significantly more likely to display poor sideline behaviors in ice hockey than baseball.

*Hypothesis 4c:* Sport parents will be significantly more accepting of other parents' displays of poor sideline behaviors in ice hockey than baseball.

**The stakes.** In sporting events, there are several sources of stimuli that can theoretically elicit emotional responses from spectators, including stimuli from the game,

organizers, and spectators (Uhrich & Koenigstorfer, 2009). Previously these stimuli have been used to examine the atmosphere of stadiums during games, but these stimuli, specifically stimuli from the game, are a useful starting point for understanding how the sport atmosphere may influence sideline behavior at a youth sport event. Game-induced stimuli—or “the stakes” as referred to in this study—refers to “stimuli originating from the game which are neither completely predictable nor under the organizer’s control” (Uhrich & Koenigstorfer, 2009, p. 334). College basketball fans that were highly identified tended to have stronger emotional responses to wins and losses, particularly in the case of difficult wins or losses (Wann, Dolan, McGeorge, & Allison, 1994). When games were won easily (i.e., the opponent was clearly easy to beat), spectators had minimal change in emotions after the game, however highly identified fans had the strongest emotional response to a loss against a difficult team. Given the high identification of parents to their children, it is possible that situations high in game-induced stimuli (i.e. stakes) will elicit a strong emotional response from parents and may be linked to poor sideline behavior (Wann et al., 1994). Additionally, when it was later in a close game, parents tended to have more poor behaviors than early in a game (Blom & Drane, 2008; Holt et al., 2008), which will be examined in the situations presented to parents in this study. The frustration-aggression theory (Wann, Carlson, et al., 1999; Ward Jr., 2002) is relevant for forming hypotheses for this factor. This theory posits that when there is more at stake (e.g., a close game, a big rival, playing for playoff spots), fans are more likely to act poorly. If parents are watching a high stakes game, they may be more likely to display poor behavior.

In this study, situations with high and low game-induced stimuli will be examined. The stakes of the situation may vary depending on whether there is a high or low stimulus when a critical event like a missed call by the referee occurs. Situations in which a high stimulus event is occurring will be considered high stakes situations, and conversely situations where there is a low stimulus event will be viewed as low stakes situations. For example, a high stakes situation might be a missed call by the referee during a tied game near the end of regulation time (i.e., high stimulus), compared to a low stakes situation of a missed call during a tied score just a few minutes into the game (i.e., low stimulus). If a situation is likely to have a more significant consequence (a high stakes situation), it is possible that parents will be more willing to consider acting poorly on the sidelines or accepting poor behavior by other parents. The research question and hypotheses I propose based on the stakes are:

*Research Question 5:* Do the stakes influence youth sport parents' report of the frequency of their own and other parents' behaviors and acceptability of other parents' behaviors on youth sport sidelines?

*Hypothesis 5a:* Sport parents will perceive poor sideline behaviors by other parents as occurring significantly more frequently in high stakes situations than in low stakes situations.

*Hypothesis 5b:* Sport parents will be significantly more likely to consider personally displaying poor sideline behaviors in high stakes situations than in low stakes situations.

*Hypothesis 5c:* Sport parents will be significantly more accepting of other parents' displays of poor sideline behaviors in high stakes situations than in low stakes situations.

***Type of occurrence.*** There are four types of occurrences that will be examined in the final situational factor. As previously discussed, Omli and LaVoi (2012) found sport

parents most frequently cited four situational occurrences that made them angry: referee incompetence, athlete unsportsmanlike conduct, coach incompetence, and parent unsportsmanlike conduct. The other 13 occurrences reported by parents were found in no more than 6.1% of the remaining responses, therefore the four most common occurrences will be used in this study. Based on referee incompetence being the most frequently reported reason for parents to get angry on youth sport sidelines, I hypothesize the following:

*Research Question 6:* Does the type of occurrence influence youth sport parents' report of the frequency of their own and other parents' behaviors and the acceptability of other parents' behaviors on youth sport sidelines?

*Hypothesis 6a:* Sport parents will perceive poor sideline behaviors as happening significantly more frequently in situations of referee incompetence compared to the other three situational occurrences (i.e. athlete unsportsmanlike conduct, coach incompetence, and parent unsportsmanlike conduct).

*Hypothesis 6b:* Sport parents will be significantly more likely to consider displaying poor sideline behaviors in situations of referee incompetence compared to the other three situational occurrences.

*Hypothesis 6c:* Sport parents will be significantly more accepting of other parents' displays of poor sideline behaviors in situations of referee incompetence compared to the other three situational occurrences.

To test these hypotheses, data were collected from an online survey completed by youth ice hockey and baseball parents. The research paradigm and design, the underlying epistemological assumptions, survey and the specific methods used to complete the study will be explained in the following section.

### Chapter 3: Methods

For this study, parents were recruited to complete an online survey from two provincial sport organizations in western Canada. This chapter will detail the study design, procedure for recruiting participants and collecting data, participant demographics, instrumentation, and variables used in the study. Based on the research questions and hypotheses proposed in the previous chapter, a survey design was selected and the reasons for the design, including advantages and disadvantages, will also be addressed in this chapter.

#### Survey Design

To better understand the design of this study, it is important to examine the underlying assumptions of the researcher and why a survey design was selected. This, as well as the procedures followed to collect data, are presented here.

**Research paradigm.** The research paradigm, which is the “the basic belief system or worldview that guides the investigator” (Guba & Lincoln, 1994, p. 105), depends on what theory fits the topic to be studied and how that theory aligns with the researcher’s worldview. Paradigms are based on ontological, epistemological, and methodological questions. Ontological questions ask about the nature of reality, epistemological questions ask what knowledge is, and methodological questions are concerned with how this knowledge can be found (Guba & Lincoln, 1994). Once a researcher has determined the paradigm that fits both the theory and his or her worldview, the methodological implications from that paradigm will guide the selection of a method for a particular study. As outlined above, this study will add to sport parent

sideline behavior research by examining the perceptions of youth sport parents, as well as contributing to a theoretical framework for future sport parent research. To accomplish this, it is necessary to work from a paradigm that is compatible with these goals. Three commonly used paradigms are positivism, postpositivism, and interpretive/constructivism (Creswell, 2014; Fossey, Harvey, McDermott, & Davidson, 2002; Guba & Lincoln, 1994; Schutt, 2005).

The interpretive paradigm differs from positivism and postpositivism in its ontology, epistemology, and methodology. Ontologically, reality is seen as relative, with multiple realities existing and reality changing over time. Reality is constructed through social interactions and, while shared elements of reality can exist between people, are highly individualized (Guba & Lincoln, 1994). From a positivist perspective, the world follows a set of laws that can be observed and, using the scientific method, be systematically predicted (Brustad, 2008). Researchers using the postpositivist paradigm acknowledge many similarities to the positivist paradigm, but recognize that there are limits to what humans can discover and know (Guba & Lincoln, 1994). This allows for research to take place in more natural settings and for context to be a consideration. The ontological orientation is labeled as “critical realism” by Guba and Lincoln (1994, p. 110), reflecting that everything in the world cannot be studied in a completely objective manner, but should be studied as objectively as possible. Epistemologically, postpositivist researchers consider objective knowledge to be the ultimate goal, but realistically, the best understanding arises from agreement between the largest number of people (Creswell, 2014). Knowledge is legitimate if it fits within the body of knowledge

in a subject area, can be replicated by other researchers, and withstands critical review from other scholars (Guba & Lincoln, 1994). This epistemology points to a methodology similar to positivism, but with consideration to the limitations of researchers' biases. Because the ontological orientation recognizes the impossibility of complete objectivity, methodological implications are that research can be carried out in more natural settings and context can be considered. Given the purpose of this study is to generalize findings and build theory, an approach that generates knowledge and is based on empirical measurement is necessary (Creswell, 2014). A postpositivist paradigm will be used to underlie the design of this study.

**Type of survey.** A cross-sectional online survey was used as the method of data collection for this study for a number of reasons (Creswell, 2014; Sue & Ritter, 2007). Surveys allow for a large sample size to make comparisons between participants on a number of variables and can be completed quickly, provided there are a reasonable number of questions. The survey can be completed whenever and wherever is convenient for the participant. Surveys administered online increase anonymity and reduce response bias in that participants may be less likely to provide socially desirable responses if their names are not recorded. In a previous sport parent study, researchers noted that in focus groups, parents were more likely to present themselves in a more positive light (although some still admitted to poor behavior related to youth sport) and were more honest when talking about the behaviors of other parents (Elliot & Drummond, 2013). By using an anonymous survey, perhaps more parents will be honest about not only others' behavior



but also their own behavior, thus reducing social desirability responses. Data can also be easily exported to statistical software for analysis.

Disadvantages to using an online survey are minimal and will not likely be a concern for this study. First, there are certain segments of the population that have limited or no internet access. For this study, parents surveyed are likely to have internet access as most sport organizations communicate strictly via email. This study will not be able to generalize to the general population, but will still be able to generalize to the sport parent population in one province in western Canada. Another disadvantage is survey abandonment. Sue and Ritter (2007) recommend keeping the survey as short as possible and including items that are interesting to the participants. This survey will likely be of interest and relevance to the parents, as the topic is relevant and interesting. The survey will only include questions related to the research question identified above to keep the length manageable. Finally, reliance on software can be a disadvantage however, researchers at the University of Minnesota have access to good quality survey software that is secure (Qualtrics), and thereby reducing costs compared to other survey distribution methods.

**Procedure.** Before beginning the study approval was granted by the Institutional Review Board at the University of Minnesota (see Appendix A for IRB approval forms). All athletes participating in ice hockey and baseball in Canada are registered through their respective provincial sport organizations and therefore these organizations were used to recruit parents to participate in the survey. Baseball parents were sent an email from the executive director of the provincial sport organization and invited to participate

in the survey. For ice hockey, 179 leagues and minor hockey associations housed under the provincial hockey organization were sent an email from the provincial senior manager of communications to send out to their membership. See Appendix B for the recruitment email used by each organization.

Both organizations sent out an initial email to parents requesting participation and sent two follow-up emails requesting participation every two weeks giving parents six weeks to respond. The baseball survey was open in May and June 2015 and the hockey survey was open in October and November 2015. This time of year was chosen because it was near beginning of the season for each sport. After receiving the email, parents could directly access the survey through a link in the email and were directed to the Qualtrics website to complete the survey. Once the survey was completed, parents could enter a draw for a Starbucks gift card by entering their name and email address. Ten participants from each of the survey groups were chosen at random and mailed gift cards as a thank you for participating. The provincial sport organizations were provided with a summary of the results and recommendations for improving parent behavior based on the results.

### **Participants**

The population used for this study were youth ice hockey and baseball parents in one province in Western Canada. For the 2015 season, there were 12,877 registered baseball players (D. Dekinder, personal communication, November 23, 2015) and in the 2014-2015 season there were 63,872 registered ice hockey players (B. Lyon, personal communication, November 23, 2015).

**Baseball parent demographics.** 625 parents completed the survey about baseball parent sideline behavior. About two-thirds of the participants were female, 94% were White, 86% were married, and just under half had some level of post-secondary education. The average age of participants was 41.56 years (SD = 6.72, age range = 22-68 years). All demographic information for participants is listed in Table 2.

Table 2

*Demographic Characteristics of Participants: Baseball (N = 625)*

Characteristic	n	%
Sex		
Male	216	34.6
Female	402	64.3
Did not answer	7	1.1
Current province/territory of residence		
Alberta	619	99.0
British Columbia	3	0.5
Manitoba	1	0.2
Saskatchewan	1	0.2
Did not answer	1	0.2
Racial/Ethnic Identification		
White	589	94.2
Latin American	2	0.3
Korean	1	0.2
Japanese	2	0.3
Aboriginal (First Nations, North American Indian, Metis, Inuk (Inuit))	22	3.5
Other	8	1.3
Did not answer	1	0.2
Current Relationship Status		
Single	32	5.1
Married	537	85.9
Civil union	6	1.0
Committed relationship	30	4.8
Other	17	2.7
Did not answer	3	0.5
Highest level of education completed		
Some high school	9	1.4
High school/GED	74	11.8
Some college/trade school	241	38.6

Associate's degree/trade school/diploma	55	8.8
Bachelor's degree (B.A., B.S.)	188	30.1
Some graduate credit	17	2.7
Graduate degree (Masters, PhD, J.D., J.M.)	41	6.6

The parents who participated in the survey represented 922 athletes, 81.5% of whom were male. The largest level represented by athletes (32.5%) was Rookie/Rally Cap, which is athletes 9 years and younger. Table 3 presents all athlete demographic information.

Table 3

*Demographic Characteristics of Athletes: Baseball (N = 922)*

Characteristic	n	%
Sex		
Male	751	81.5
Female	171	18.5
Level		
Rookie/Rally Cap (9U)	300	32.5
Mosquito (11U)	196	21.3
Pee wee (13U)	151	16.4
Bantam (15U)	125	13.6
Midget (18U)	101	11.0
Not specified	49	5.3

**Ice hockey parent demographics.** There were 415 participants who filled out the survey about sideline behavior in ice hockey. Similar to the baseball sample demographics, just under two-thirds of the participants were female, the majority were White and married, and just over half had some level of college education. Participants ranged in age from 27 to 67 years old, with an average age of 41.49 (SD = 5.992). See Table 4 for all demographic information.

Table 4

*Demographic Characteristics of Participants: Hockey (N = 415)*

Characteristic	n	%
Sex		
Male	153	36.9
Female	258	62.2
Did not answer	4	1.0
Current province/territory of residence		
Alberta	413	99.5
British Columbia	1	.2
Manitoba	1	.2
Racial/Ethnic Identification		
White	396	95.4
South Asian (e.g., East Indian, Pakistani, Sri Lankan, etc.)	3	.7
Black	1	.2
Aboriginal (First Nations, North American Indian, Metis, Inuk (Inuit))	12	2.9
Other	2	.5
Did not answer	1	.2
Current Relationship Status		
Single	12	2.9
Married	364	87.7
Civil union	6	1.5
Committed relationship	23	5.5
Other	10	2.4
Highest level of education completed		
Some high school	8	1.9
High school/GED	43	10.4
Some college/trade school	90	21.7
Associate's degree/trade school/diploma/certificate	141	34.0
Bachelor's degree (B.A., B.S.)	95	22.9
Some graduate credit	6	1.4
Graduate degree (Masters, PhD, J.D., J.M.)	28	6.7
Other	3	.7
Did not answer	1	.2

The participants represented 716 athletes, again representing about 80% male and 20% female players. The largest age group represented here was Atom (9-10 years old) and Pee wee (11-12 years old). Athlete demographics are presented in Table 5.

Table 5

*Demographic Characteristics of Athletes: Hockey (N = 716)*

Characteristic	n	%
Sex		
Male	586	81.8
Female	130	18.2
Level		
Initiation (6 and Under)	74	10.3
Novice (7-8)	97	13.5
Atom (9-10)	141	19.7
Peewee (11-12)	156	21.8
Bantam (13-14)	126	17.6
Midget (15-17)	118	16.5
Not specified	4	.6

**Instrumentation**

The survey instrument used in this study was designed specifically to answer the research questions presented in the previous chapter and consisted of three parts for each sport (see Appendix C for the baseball survey and Appendix D for the ice hockey survey). Part I included questions about demographics, sport experience, sport knowledge, and child(ren)'s participation in either baseball or ice hockey. In Part II, parents reported how frequently they perceived mothers and fathers displaying 17 different behaviors on the sidelines of their child's sport, how frequently they personally displayed these behaviors, and how acceptable they think it is for other mothers and fathers to display each behavior. The behaviors in Part II were drawn from previous research on what types of background anger exist on youth sport sidelines (Omli & LaVoi, 2009, 2012; Shields et al., 2005, 2007) and parent behavior on youth sport sidelines that children do not prefer (Jeffery-Tosoni et al., 2015; Omli & Wiese-Bjornstal, 2011). These behaviors are important to examine not only because it is known through

research these behaviors occur on youth sports sidelines (Blom & Drane, 2008; Bowker et al., 2009; Holt et al., 2008; Kidman et al., 1999), but also because children do not like parents to display some of these behaviors (Omli & Wiese-Bjornstal, 2011), these behaviors correspond with known triggers for parent anger (Omli & LaVoi, 2012) and these are behaviors that contribute to background anger (Omli & LaVoi, 2009; Wings, 2012). The 17 behaviors that sport parents responded to were:

- Yell at athletes on the field (i.e., taunt, personally single an athlete out, harshly criticize, slam, name call, trash talk)
- Act in a way that is embarrassing
- Act like a ‘bad sport’
- Yell at the referee(s) (i.e., taunt, personally single out, harshly criticize, slam, name call)
- Yell at the coach(es) (i.e., taunt, personally single out, harshly criticize, slam, name call)
- ‘Get into it’ verbally, as in arguing or yelling with someone (another fan, parent, coach)
- ‘Get into it’ physically, as in fighting, punching, choking or slapping someone (another fan, parent, coach)
- ‘Coach’ from the sidelines (i.e., yell instructions)
- Encourage the athletes to ‘play rough’ (i.e., push, elbow, take someone out, retaliate, cheap shots)
- Encourage the athletes to play outside the rules (i.e., faking injury, shirt pulling, taking a dive)
- Cheer for good play for both teams
- Cheer for athlete effort
- Use profanity loud enough for athletes to hear
- Show up to a practice or game intoxicated
- Distract athletes from focusing on the game
- Sit silently-and clap only when an athlete (or the team) does something good
- Yell out racial slurs to, or about, someone (e.g., athlete, parent, coach, referee)

In Part III of the survey, four different occurrences that are most commonly reported by parents to make them angry on youth sport sidelines (Omli & LaVoi, 2012)—referee incompetence, athlete unsportsmanlike conduct, coach unfairness, and parent

unsportsmanlike conduct—were presented. Each occurrence was framed in a low and high stakes situation and parents were randomized to respond to the high and low stakes situations for one of the four occurrences. Parents were again asked how frequently they thought mothers and fathers would consider displaying different behaviors on the sidelines of their child’s sport, how frequently they would personally consider displaying these behaviors, and how acceptable they think it is for other mothers and fathers to display each behavior. The behaviors listed in Part II were used with the exception of “show up to a practice or game intoxicated” because that behavior is not a reaction to a particular situation, which is what this part of the survey was designed to examine.

In both Part II and III, questions about frequency of displaying behaviors were answered using a five-point Likert-type scale used in previous sport parent research (Omli & LaVoi, 2009), from *never (1)* to *all the time (5)*. The questions about acceptability were also answered using a five-point Likert-type scale previously used to examine hypothetical situations about sportsmanship (Shields et al., 2007), ranging from *never appropriate (1)* to *always appropriate (5)*.

**Validity and Reliability.** Validity in survey research refers to knowing whether the instrument can meaningful inferences from the reported scores (Creswell, 2014). Since the instrument used here is innovative and constructed for the purpose of adding new knowledge, there is no established validity from previous studies. Creswell (2014) identified three types of validity that can be established for surveys: content validity, predictive validity, and construct validity. Of these, construct validity is typically considered the most important as it “focused on whether the scores serve a useful



purpose” (Creswell, 2014, p. 160) and if the constructs to be measured are in fact measured accurately. For this study, an expert panel reviewed both the baseball and ice hockey surveys and a pilot study was done with each survey prior to refine the survey and establish construct validity.

Like validity, reliability is not available since the survey was designed specifically for this study. There was consistency in test administration because all participants received the same email and had access to the same online survey. This helped eliminate errors due to careless administration, and scoring errors were eliminated by exporting of survey data directly into SPSS statistical software. Data were checked for completion of the survey and for extreme outliers, but not having to manually enter data decreased the likelihood of errors in data entry (Creswell, 2014).

**Expert panel and pilot testing.** Before the surveys were sent to parents an expert panel reviewed the surveys and pilot testing was done with a small group of parents and sport administrators. The survey items were developed through careful review of previous research and through discussion between the principle investigator and an advisor, an expert in sport parent research. The expert panel consisted of seven people: youth sport experts from universities and baseball/softball and ice hockey coaches. Based on their feedback some questions were modified and the survey was sent to a pilot group of parents and sport administrators.

The pilot groups included 32 baseball and 35 hockey participants. The most significant piece of feedback was the length of the survey and therefore the decision was made to have parents answer questions about one of the four occurrences, rather than all

four occurrences as was planned in the original survey. Demographic questions were also modified based on feedback from the pilot groups to properly reflect levels of sport common in the area where the survey was distributed.

## Variables

Although all variables have been discussed in previous sections, the variables are paired here with corresponding hypotheses and survey questions in Table 6 to show the relationship between the variables and the survey. Following the table of variables is the results chapter containing results for all research questions and hypotheses listed here.

Table 6

### *Variables, Hypotheses, and Related Survey Items*

Variable Name	Related Hypotheses	Item(s) on Survey
<b>Independent Variable 1</b> Gender of parent answering survey	Hypotheses 1a	Part II: Q3-5
<b>Independent Variable 2</b> Gender of other parents	Hypotheses 2a-b	Part II: Q1, 2, 4, 5
<b>Independent Variable 3</b> Sport experience	Hypotheses 3a-b	Part II: Q3-5
<b>Independent Variable 4</b> Type of sport	Hypotheses 4a-c	Part II: Q1-5
<b>Independent Variable 5</b> The stakes	Hypotheses 5a-c	Part III: All situations, Q1-5
<b>Independent Variable 6</b> Type of occurrence	Hypotheses 6a-c	Part III: All situations, Q1-5
<b>Dependent Variable 1</b> Frequency of other parents' displays of behaviors	Hypotheses 2a, 4a, 5a, 6a	Part II: Q1-2 Part III: All situations, Q1-2
<b>Dependent variables 2</b> Frequency of own display of behaviors	Hypotheses 1a, 3a, 4b, 5b, 6b	Part II: Q3 Part III: All situations, Q3
<b>Dependent variable 3</b> Acceptability of other parents' displays of behaviors	Hypotheses 2b, 3b, 4c, 5c, 6c	Part II: Q4-5 Part III: All situations, Q4-5

*Note.* Adapted from Creswell, 2014.

## Chapter 4: Results

Using SPSS version 22 all data collected were analyzed to answer the six research questions presented in the previous chapters. The overarching research question guiding this study was: Do personal and situational factors influence youth sport parents' report of the frequency of their own behaviors, perceptions of the frequency of other parents' behaviors, and the acceptance of these behaviors on youth sport sidelines? This chapter outlines the data analysis procedures for each research question and corresponding results from the baseball and ice hockey parent surveys.

### Data Analysis

Depending on the research question, data were analyzed using independent-samples t-tests, paired-samples t-tests, and one-way between-groups analysis of variance (ANOVA). Effect sizes were reported where applicable. The analysis performed for each research question is described in each subsection of this chapter before results are presented. For questions about the frequency of behaviors, the responses were from 1 (*never*) to 5 (*always*) and responses for questions about acceptability were from 1 (*never appropriate*) to 5 (*always appropriate*).

All data were checked for assumptions of normal distribution and homogeneity of variance. Most variables were not normally distributed but the large sample size means that a violation of this assumption should not affect the statistical analysis (Pallant, 2013). Levene's test was used to check homogeneity of variance for independent-samples t-test and variables that violated the assumption used the alternative t-test provided in the SPSS output. All variables that violated this assumption are noted in the tables for each

hypothesis. Where ANOVA was used (comparing types of occurrences in research question 6), homogeneity of variance was tested using Levene's test and if violated, the Welch test was used in place of ANOVA (Field, 2005; Pallant, 2013). This is noted on all tables when used. Since the hypotheses indicated occurrences of referee/umpire incompetence might be significantly different, planned contrasts were used to compare the groups where a significant difference was found through the ANOVA.

Effect sizes were calculated for t-tests and contrasts where a significant difference was found using Pearson's correlation coefficient  $r$ . Effect size was calculated using the formula  $r = \sqrt{\frac{t^2}{t^2 + df}}$  and reported for all significant variables in each section. Effect size was interpreted using the following benchmarks:

- $r = .10$  (small effect)
  - $r = .30$  (medium effect)
  - $r = .50$  (large effect)
- (Field, 2005, p. 32)

Some surveys had missing responses. Respondents who missed 10 or more questions in a row were considered to have abandoned the survey and these results were not included in the analysis. This left a total sample size of 1040, 625 baseball participants and 415 ice hockey participants.

Parent sideline behavior is discussed throughout this chapter in various ways. In the first part of the survey used to answer research questions 1 to 4, parents were first asked their perception of how often they perform each behavior (from the list on page 75) on youth sport sidelines, how often mothers perform each of the behaviors, and how often fathers perform each of the behaviors. Next, parents were asked how acceptable they

think it is for mothers to perform each of the behaviors and how acceptable it is for fathers to perform each of the behaviors. The parents' perception of these behaviors was based on what they report generally doing or seeing other parents do on youth sport sidelines. The second part of the survey used to answer research questions 5 and 6 asked parents to consider how likely they think they would perform the same list of behaviors in a hypothetical situation. In the same hypothetical situation, parents were asked how likely they thought mothers and fathers would be to display each behavior, and how acceptable it would be to display that behavior in that situation. The results for each research question are explained in the following sections.

### **Personal Factors**

Two personal factors, gender and sport experience, were examined in this study. Research questions 1 and 2 were related to gender and research question 3 was associated with sport experience. Baseball and ice hockey results are presented separately for both personal factors.

**Gender.** The following research questions were used to guide this portion of the data collection:

1. Does gender influence youth sport parents' report of the frequency of their own behavior and their perceptions of acceptability of other parents' behaviors on youth sport sidelines?
2. Do youth sport parents perceive a difference between mothers and fathers when reporting the frequency and acceptability of other parents' behaviors on youth sport sidelines?

Research question 1 was analyzed using an independent-samples t-test for each dependent variable (i.e., each behavior that parents were asked about in Part II of the

survey). Research question 2 was analyzed using a paired-samples t-test for each dependent variable.

**Hypothesis 1.** This hypothesis stated that fathers will be significantly more likely to report displaying poor sideline behaviors than mothers. For both baseball and ice hockey parents, fathers reported displaying most poor sideline behaviors more frequently than mothers, and mothers reported displaying good behaviors more often than fathers.

*Baseball participants.* A significant difference was found between mothers and fathers for all behaviors except physically fighting, coaching from the sidelines, distracting athletes from the game, and sitting or standing silently. Of the significantly different behaviors, fathers were more likely to display poor behaviors and mothers were more likely to display good behaviors. Poor behaviors that were significantly different included yelling at athletes on the field ( $t(270) = 3.328, p = .001, r = .01$ ), acting in an embarrassing way ( $t(373) = 2.488, p = .013, r = .01$ ), acting like a bad sport ( $t(315) = 3.362, p = .001, r = .01$ ), yelling at the umpire ( $t(334) = 3.635, p = .000, r = .01$ ) and coach ( $t(257) = 3.588, p = .000, r = .01$ ), verbally getting into it ( $t(312) = 3.961, p = .000, r = .01$ ), encouraging athletes to play rough ( $t(276) = 3.897, p = .000, r = .01$ ) and outside the rules ( $t(262) = 2.180, p = .030, r = .01$ ), swearing loud enough for athletes to hear ( $t(336) = 2.502, p = .013, r = .01$ ), showing up intoxicated ( $t(252) = 2.178, p = .030, r = .01$ ), and yelling something offensive ( $t(283) = 2.402, p = .017, r = .01$ ). In the case of two positive behaviors (cheer for good play ( $t(615) = -2.264, p = .024, r = .00$ ) and cheer for athlete effort ( $t(616) = -2.017, p = .043, r = .00$ )), mothers were more likely to display the behavior than fathers.

All results had a very small effect size ( $r = .01$  for most behaviors) and therefore while the results were statistically significant, there is practically no effect. The mean reported scores for all poor behaviors except coaching from the sidelines (mothers = 2.24 and fathers = 2.41) was under 1.30, and good behaviors were over 4.00, with the exception of sitting or standing silently (mothers = 2.75 and fathers = 2.90). Full results for this hypothesis are presented in Table E1.

*Ice hockey participants.* When asked about their own behavior, there were significant differences in only seven behaviors reported by mothers and fathers. As with baseball parents, fathers were more likely to display poor behaviors and mothers more likely to display good behaviors. Behaviors that were significantly different between mothers and fathers were acting like a bad sport ( $t(290.847) = 2.598, p = .010, r = .15$ ), yelling at the referee ( $t(274.643) = 4.615, p = .000, r = .27$ ), coaching from the sidelines ( $t(281.239) = 2.815, p = .005, r = .17$ ), encouraging athletes to outside the rules ( $t(270.542) = 2.399, p = .017, r = .14$ ), cheering for good play ( $t(409) = -3.296, p = .001, r = .16$ ), cheering for athlete effort ( $t(408) = -2.864, p = .004, r = .14$ ), and using profanity loud enough for athletes to hear ( $t(286.365) = 2.379, p = .018, r = .14$ ).

For all significant differences, effect size was small (0.10-0.30) but larger than the effect size for baseball participants. The means were under 1.50 for poor behaviors with the exception of coaching from the sidelines (mothers = 1.83 and fathers = 2.11) and good behaviors had means between 3.20 and 4.44. Table E2 lists all results from this hypothesis.

**Hypothesis 2a.** In this hypothesis the differences between reported frequency of behaviors of mothers and fathers was examined. It was hypothesized that parents would report fathers as being significantly more likely to display poor sidelines behaviors than mothers. This was true for most behaviors in both baseball and ice hockey.

*Baseball participants.* Across all behaviors, parents reported that fathers were significantly more likely to display all poor behaviors. This included yelling at athletes ( $t(624) = -8.086, p = .000, r = .01$ ), acting in an embarrassing way ( $t(621) = -4.346, p = .000, r = .01$ ), acting like a bad sport ( $t(620) = -6.807, p = .000, r = .01$ ), yelling at the umpire ( $t(617) = -8.223, p = .000, r = .01$ ) and coach ( $t(622) = -7.703, p = .000, r = .01$ ), verbally and physically getting into it ( $t(621) = -5.389, p = .000, r = .01$ ;  $t(601) = -6.076, p = .000, r = .01$ ), coaching from the sidelines ( $t(615) = -5.574, p = .000, r = .01$ ), encouraging athletes to play rough ( $t(619) = -7.563, p = .000, r = .01$ ) and outside the rules ( $t(618) = -6.629, p = .000, r = .01$ ), using profanity ( $t(611) = -9.877, p = .000, r = .01$ ), showing up intoxicated ( $t(620) = -6.365, p = .000, r = .01$ ), distracting athletes ( $t(615) = -4.324, p = .000, r = .01$ ), and yelling something offensive ( $t(622) = -6.732, p = .000, r = .01$ ). Mothers were significantly more likely to display all positive behaviors, including cheering for good play ( $t(620) = 9.930, p = .000, r = .01$ ), cheering for athlete effort ( $t(614) = 11.053, p = .000, r = .02$ ), and sitting or standing silently ( $t(619) = 5.038, p = .000, r = .01$ ). As with hypothesis 1 baseball participants, while differences were significant at  $p < .05$ , the effect size was very minimal ( $r = .01$  for almost all behaviors). See Table E3 for full results. The means reported in this section were slightly higher than when parents reported on their own behavior, but overall were still low for



poor behaviors (1.10-2.03 for all behaviors except coaching from the sidelines, mothers = 2.80 and fathers = 2.97). This corresponds with *never* to *almost never* for most behaviors.

*Ice hockey participants.* With the exception of acting in an embarrassing way, all behaviors were significantly different between mothers and fathers as reported by ice hockey parents. All poor behaviors were reported as displayed significantly more often by fathers than mothers and all good behaviors were displayed more frequently by mothers. The poor behaviors included yelling at athletes ( $t(414) = -3.924, p = .000, r = .19$ ), acting like a bad sport ( $t(411) = -3.129, p = .002, r = .15$ ), yelling at the referee ( $t(412) = -6.188, p = .000, r = .29$ ) and coaches ( $t(413) = -7.692, p = .000, r = .35$ ), verbally getting into it ( $t(413) = -3.242, p = .001, r = .16$ ), physically getting into it ( $t(413) = -9.765, p = .000, r = .43$ ), coaching from the sidelines ( $t(414) = -5.348, p = .000, r = .25$ ), encouraging athletes to play rough ( $t(414) = -7.193, p = .000, r = .33$ ) and outside the rules ( $t(413) = -9.259, p = .000, r = .41$ ), using profanity ( $t(413) = -13.132, p = .000, r = .54$ ), showing up intoxicated ( $t(411) = -9.409, p = .000, r = .42$ ), distracting athletes ( $t(410) = -8.723, p = .000, r = .40$ ), and yelling something offensive ( $t(411) = -9.801, p = .000, r = .44$ ). Good behaviors reported in this section were cheering for good play ( $t(408) = 6.041, p = .000, r = .29$ ) and athlete effort ( $t(405) = 6.534, p = .000, r = .31$ ) and sitting or standing quietly ( $t(413) = 3.864, p = .000, r = .19$ ).

The means for reported behaviors of mothers and fathers were slightly higher for poor behaviors displayed by ice hockey parents compared to baseball parents and ranged from 1.23 to 3.13 (*never* to *sometimes*). Means for good behaviors ranged from 3.13 to 3.94 (*sometimes*). The effect size for these comparisons was small for all behaviors (.15-

.29) except for yelling at coaches (.35), physically getting into it (.43), encouraging athletes to play rough (.33) and outside the rules (.41), cheering for effort (.31), showing up intoxicated (.42), distracting athletes (.40), and yelling something offensive (.44), which had a medium effect size. Using profanity had a large effect size (0.54). Full results for this hypothesis can be found on Table E4.

**Hypothesis 2b.** This hypothesis tested the differences in acceptability of behaviors between mothers and fathers, specifically that parents will be significantly more accepting of fathers' displays of poor behaviors than mothers' displays of poor behaviors.

*Baseball participants.* This hypothesis was rejected for all behaviors; there was no difference between parents' acceptability for poor or positive behaviors displayed by mothers or fathers. For the most part, parents thought all poor behaviors were *never appropriate*, with the exception of coaching from the sidelines, which was ranked close to *appropriate once in a while*. Table E5 lists all results for hypothesis 2b.

*Ice hockey participants.* Similar to baseball participants, ice hockey parents reported no differences in acceptability of behaviors between mothers and fathers with the exception of yelling something offensive to, or about, someone. For this behavior, parents reported it was more acceptable for fathers ( $M = 1.08, SD = .416$ ) than mothers ( $M = 1.04, SD = .242$ ) to yell something offensive ( $t(414) = -2.069, p = .039, r = .10$ ). The effect size here is small and the means are still very close to 1, meaning *never appropriate*. Full results for this hypothesis are in Table E6.

**Sport experience.** The sport experience variable was a unique variable that was created specifically for this study. This variable was used to answer the following research question:

Does sport experience of the youth sport parent influence parents' report of the frequency of their own behaviors and the acceptability of other parents' behaviors on youth sport sidelines?

To calculate a sport experience score, three factors were used: highest level played, highest level coached, and sport knowledge. Highest level played and highest level coached ranged from 0 (*never played*) to 5 (*college/professional*) and sport knowledge was determined through a five question multiple choice quiz. See Appendix B for baseball and Appendix C for ice hockey quiz questions and answers. The sport experience variable was calculated by adding the three factors together for a score out of 15. Highest levels played and coached are presented in Table 7 for baseball parents. For baseball parents the knowledge quiz score was generally high ( $M = 4.09$ ,  $SD = 1.07$ ) but the overall sport experience variable score was low ( $M = 5.79$ ,  $SD = 2.37$ ,  $Md = 5.00$ ,  $IQR: 4, 8$ ).

Table 7

*Previous Sport Experience: Baseball Participants (N = 625)*

Characteristic	n	%
Highest level competed in baseball		
Never played	228	36.5
Community ('A')/House League	254	40.6
Minor – Competitive ('AA')	70	11.2
Minor – Performance ('AAA')	31	5.0
Senior	37	5.9
College/Professional	5	0.8
Highest level coached in baseball		
Never coached	336	53.8

Community ('A')/House League	186	29.8
Minor – Competitive ('AA')	42	6.7
Minor – Performance ('AAA')	15	2.4
Senior	6	1.0
Did not answer	40	6.4
Characteristic	M	SD
Knowledge quiz score (0-5)	4.09	1.07
Overall sport experience variable (0-15)	5.79	2.37

Sport experience variable factors were similar for ice hockey parents, although more ice hockey parents had never played or coached the sport compared to baseball parents. The score for the knowledge quiz was high ( $M = 4.32$ ,  $SD = .878$ ) but the sport experience variable was again low ( $M = 5.66$ ,  $SD = 2.549$ ,  $Md = 5.00$ ,  $IQR: 4, 8$ ). Table 8 shows all sport experience variables for ice hockey parents.

Table 8

*Previous Sport Experience: Ice Hockey Participants (N = 415)*

Characteristic	n	%
Highest level competed in ice hockey		
Never played	260	62.7
Community ('A')/House League	77	18.6
Minor – Competitive ('AA')	21	5.1
Minor – Performance ('AAA')	21	5.1
Senior	20	4.8
College/Professional	16	3.9
Highest level coached in ice hockey		
Never coached	278	67.0
Community ('A')/House League	95	22.9
Minor – Competitive ('AA')	19	4.6
Minor – Performance ('AAA')	16	3.9
Senior	2	.5
College/Professional	3	.7
Did not answer	2	.5
Characteristic	M	SD
Knowledge quiz score (0-5)	4.32	.878
Overall sport experience variable (0-15)	5.66	2.549

Based on the interquartile ranges, four groups were created representing sport experience. The lowest scoring group (baseball:  $N = 163$ , ice hockey:  $N = 149$ ) was compared to the highest scoring group (baseball:  $N = 112$ , ice hockey:  $N = 74$ ). For both baseball and ice hockey, the low experience group had a sport experience score less than or equal to 4 and the highest scoring group had a sport experience score greater than or equal to 8. The groups were compared using an independent-samples t-test for each dependent variable. Effect sizes ( $r$ ) were calculated for all significant t-tests.

**Hypothesis 3a.** The first hypothesis examined related to sport experience was that there will be a significant difference in the self-reported display of poor sideline behaviors between sport parents with high sport experience and sport parents with low sport experience.

*Baseball participants.* Some behaviors elicited significantly different responses between high and low sport experience groups. Specifically, yelling at athletes ( $t(134) = -2.823, p = .005, r = .02$ ), acting in a way that is embarrassing ( $t(167) = -4.092, p = .000, r = .02$ ), acting like a bad sport ( $t(142) = -3.950, p = .000, r = .03$ ), yelling at the umpire ( $t(124) = -6.728, p = .000, r = .04$ ), yelling at coaches ( $t(124) = -3.566, p = .001, r = .03$ ), verbally getting into it ( $t(136) = -4.242, p = .000, r = .03$ ), coaching from the sidelines ( $t(272) = -3.338, p = .001, r = .01$ ), encouraging athletes to play rough ( $t(117) = -4.423, p = .000, r = .03$ ), using profanity loud enough for athletes to hear ( $t(136) = -3.949, p = .000, r = .03$ ), and yelling something offensive ( $t(163) = -3.039, p = .003, r = .02$ ).

On all behaviors with a significant difference, the high sport experience group was more likely to display poor behavior. The means indicated that poor behaviors did not happen all that often though, with all poor behaviors being under 1.50 (*never*) except coaching from the sidelines (high sport experience  $M = 2.51$ ; *almost never*). Effect sizes for significant t-tests were all very small ( $r = .04$  or less). Table E7 includes all means, standard deviations, and t-test statistics.

*Ice hockey participants.* Only four behaviors were reported as significantly different between high and low sport experienced parents. Parents with more experience were more likely to act like a bad sport ( $M = 1.36$ ,  $SD = .632$ ) than parents with less experience ( $M = 1.19$ ,  $SD = .456$ ;  $t(109.913) = -2.031$ ,  $p = .045$ ,  $r = .19$ ) and more experienced parents were more likely to yell at the referee ( $M = 1.58$ ,  $SD = .665$ ) than less experienced parents ( $M = 1.28$ ,  $SD = .605$ ;  $t(131.695) = -3.181$ ,  $p = .002$ ,  $r = .27$ ). Parents with more experience were also more likely to use profanity loud enough for athletes to hear ( $M = 1.26$ ,  $SD = .443$ ) compared to less experienced parents ( $M = 1.11$ ,  $SD = .443$ ;  $t(123.175) = -2.040$ ,  $p = .043$ ,  $r = .18$ ). Parents with less experience were more likely to report cheering for good play ( $M = 4.17$ ,  $SD = .868$ ) than parents with more experience ( $M = 3.85$ ,  $SD = .989$ ;  $t(221) = 2.498$ ,  $p = .013$ ,  $r = .17$ ). The means still indicate infrequent poor behavior (close to 1 = *never*) and the effect sizes are all small (under  $r = .30$ ). All results are presented in Table E8.

***Hypothesis 3b.*** The second sport experience hypothesis examined differences in acceptability of poor behavior on youth sport sidelines. Specifically, this hypothesis examined whether there would be a significant difference in acceptability for *other*

*parents* to display poor sideline behaviors between sport parents with high sport experience and sport parents with low sport experience. Since the acceptability of behaviors questions in the survey asked about mothers and fathers separately, the results for this hypothesis are presented for acceptability of mothers' behavior first followed by fathers' behavior for each sport.

*Baseball participants.* High sport experience participants reported that it was more acceptable for mothers to display the following poor behaviors: acting a way that is embarrassing ( $t(128) = -2.244, p = .027, r = .02$ ), yelling at the umpire ( $t(129) = -2.372, p = .019, r = .02$ ), verbally getting into it ( $t(115) = -2.078, p = .040, r = .02$ ), and distracting athletes from the game ( $t(125) = -2.671, p = .009, r = .02$ ; see Table E9 for all results). For fathers' behavior, high sport experience parents reported it was more acceptable for fathers to display six poor behaviors: acting in a way that was embarrassing ( $t(152) = -2.279, p = .024, r = .02$ ), acting like a bad sport ( $t(111) = -2.144, p = .034, r = .02$ ), yelling at the umpire ( $t(139) = -3.147, p = .002, r = .02$ ), verbally getting into it ( $t(117) = -2.212, p = .029, r = .02$ ), encouraging athletes to play rough ( $t(115) = -1.998, p = .048, r = .02$ ), and distracting athletes from the game ( $t(127) = -2.513, p = .013, r = .02$ ; see Table E10 for all results). Again in this section, although there were significant differences, the means were generally low (under 2.00 = *appropriate once in a while*) for both mothers and fathers. As in previous research questions, although there were significant differences between several reports of acceptability of behaviors, the effect size ( $r$ ) was very small.

*Ice hockey participants.* Parents of ice hockey players only reported a difference in acceptability of behavior in one behavior in this section. High sport experience parents thought it was more acceptable for fathers to distract athletes from the game ( $M = 1.09$ ,  $SD = .338$ ) than low experience parents ( $M = 1.01$ ,  $SD = .082$ ;  $t(77.349) = -2.203$ ,  $p = .031$ ,  $r = .24$ ). The effect size here was small and the means were near 1, meaning both groups of parents still consider this to be close to *never appropriate*. In addition to personal factors, situational factors were also examined in this study.

### **Situational Factors**

Three situational factors were examined here: the type of sport, the stakes, and the type of occurrence. Research questions 4-6 are answered in this section based on the hypotheses presented in Chapter 2.

**Type of sport.** Research question 4 was asked as a comparison between two sports, baseball and ice hockey. The question asked was:

Does sport type influence youth sport parents' report of the frequency of their own and other parents' behaviors and the acceptability of other parents' behaviors on youth sport sidelines?

Three hypotheses were proposed to answer this question. Independent-samples t-tests were used to test the hypotheses. All significant results are reported here with effect sizes ( $r$ ). As with previous questions, results reporting the frequency and acceptability of other parents' behaviors are separated by mothers and fathers.

**Hypothesis 4a.** The first hypothesis was about other parents' behavior, specifically that parents will perceive poor sideline behaviors by other parents as occurring significantly more frequently in ice hockey than baseball. This was true for



almost every poor behavior for both mothers and fathers. Mothers of ice hockey players were reported as displaying the following poor behaviors more frequently than mothers of baseball players: yelling at athletes on the ice ( $t(1038) = 15.181, p = .000, r = .43$ ), acting in an embarrassing way ( $t(1035) = 14.631, p = .000, r = .41$ ), acting like a bad sport ( $t(1033) = 14.239, p = .000, r = .41$ ), yelling at the referee/umpire ( $t(1032) = 13.900, p = .000, r = .40$ ) and coaches ( $t(1037) = 11.351, p = .000, r = .33$ ), verbally ( $t(1035) = 13.227, p = .000, r = .38$ ) and physically getting into it ( $t(691.436) = 5.174, p = .000, r = .19$ ), encouraging athletes to play rough ( $t(1035) = 14.649, p = .000, r = .41$ ) and outside the rules ( $t(770.678) = 6.022, p = .000, r = .21$ ), using profanity ( $t(1032) = 6.810, p = .000, r = .21$ ), showing up intoxicated ( $t(765.602) = 3.632, p = .000, r = .13$ ), and yelling something offensive ( $t(1035) = 9.629, p = .000, r = .29$ ).

Cheering for good play ( $t(821.861) = -7.622, p = .000, r = .26$ ) and cheering for athlete effort ( $t(1029) = -5.854, p = .000, r = .18$ ) were reported to occur more frequently by baseball mothers, however parents reported that ice hockey mothers were more likely to sit or stand quietly than baseball mothers ( $t(1035) = 2.704, p = .007, r = .08$ ). When looking at the mean scores, most hockey mothers' poor behavior was about 2.00-2.50 (*almost never*; except physically getting into it at 1.23 and coaching from the sidelines at 2.89) whereas baseball mothers' behavior was all under 2.00 except coaching from the sidelines ( $M = 2.80$ ). Effect sizes reported here are small to medium (see Table E13 for all results).

Similar results were found for reports of fathers' behavior. All poor behaviors were more likely to be displayed by ice hockey fathers compared to baseball fathers,

including: yelling at athletes on the ice ( $t(1038) = 12.333, p = .000, r = .36$ ), acting in an embarrassing way ( $t(1037) = 12.125, p = .000, r = .35$ ), acting like a bad sport ( $t(957.796) = 11.803, p = .000, r = .36$ ), yelling at the referee/umpire ( $t(955.463) = 13.425, p = .000, r = .40$ ) and coaches ( $t(1036) = 11.417, p = .000, r = .33$ ), verbally ( $t(1037) = 11.518, p = .000, r = .34$ ) and physically getting into it ( $t(675.891) = 7.941, p = .000, r = .34$ ), coaching from the sidelines ( $t(1035) = 2.746, p = .006, r = .09$ ), encouraging athletes to play rough ( $t(821.073) = 14.049, p = .000, r = .44$ ) and outside the rules ( $t(798.115) = 7.727, p = .000, r = .26$ ), using profanity ( $t(1026) = 8.694, p = .000, r = .26$ ), showing up intoxicated ( $t(755.527) = 6.725, p = .000, r = .24$ ), distracting athletes ( $t(922.317) = 4.524, p = .000, r = .15$ ), and yelling something offensive ( $t(1036) = 11.162, p = .000, r = .33$ ).

As with the reports of mothers' behavior, baseball fathers were reported as cheering for good play ( $t(1035) = -6.486, p = .000, r = .20$ ) and cheering for athlete effort ( $t(844.272) = -4.223, p = .000, r = .14$ ) more frequently than ice hockey fathers. Ice hockey fathers were reported as sitting or standing quietly more often than baseball fathers. ( $t(1034) = 3.320, p = .000, r = .10$ ). Most poor behaviors were reported as occurring *never* for baseball fathers and *almost never* for hockey fathers. All results have a small to medium effect size (see Table E14 for all results).

**Hypothesis 4b.** The second hypothesis examined in relation to sport type was that parents would be significantly more likely to display poor sideline behaviors in ice hockey than baseball. For most behaviors, this hypothesis was correct. Ice hockey parents reported being more likely to yell at athletes ( $t(561.229) = 4.723, p = .000, r = .20$ ), act

in an embarrassing way ( $t(709.023) = 3.977, p = .000, r = .15$ ), act like a bad sport ( $t(729.412) = 3.295, p = .001, r = .12$ ), yell at the referee/umpire ( $t(666.643) = 5.741, p = .000, r = .22$ ) and coaches ( $t(538.242) = 2.713, p = .007, r = .12$ ), verbally get into it ( $t(697.843) = 3.120, p = .002, r = .12$ ), physically get into it ( $t(467.787) = 2.262, p = .024, r = .10$ ), encourage athletes to play rough ( $t(537.712) = 4.685, p = .000, r = .20$ ), and yell something offensive ( $t(732.655) = 2.521, p = .012, r = .09$ ).

Baseball parents were more likely to coach from the sidelines ( $t(944.070) = -5.831, p = .000, r = .19$ ), distract athletes ( $t(913.279) = -2.130, p = .033, r = .07$ ), cheer for good play ( $t(1037) = -3.709, p = .000, r = .11$ ), and cheer for athlete effort ( $t(808.568) = -2.639, p = .008, r = .09$ ) than ice hockey parents. Ice hockey parents were more likely to display one positive behavior—sitting or standing quietly ( $t(1033) = 5.671, p = .000, r = .17$ ). Overall the means for most poor behaviors was low ( $M = 1.40$  or less) with the exception of coaching from the sidelines, which was 1.93 for ice hockey and 2.30 for baseball parents. Effect sizes for the differences in this hypothesis were very small to small ( $r = .07-.22$ ). All results are listed on Table E15.

**Hypothesis 4c.** Acceptability of behaviors on youth sport sidelines was examined in hypothesis 4c. Specifically this hypothesis stated sport parents would be significantly more accepting of other parents' displays of poor sideline behaviors in ice hockey than baseball. Results were separated by mothers and fathers and only a few behaviors were reported as more appropriate in one sport or the other.

For mothers, yelling at athletes ( $t(744.270) = 1.977, p = .048, r = .07$ ), yelling at the referee/umpire ( $t(703.979) = 2.865, p = .004, r = .11$ ), verbally getting into it ( $t$

(758.218) = 2.234,  $p = .026$ ,  $r = .08$ ), and encouraging athletes to play rough ( $t(581.139) = 2.897$ ,  $p = .004$ ,  $r = .12$ ) were reported as more appropriate for mothers in ice hockey than in baseball. Coaching from the sidelines ( $t(965.967) = -6.400$ ,  $p = .000$ ,  $r = .20$ ) and distracting athletes from the game ( $t(1023.961) = -2.041$ ,  $p = .042$ ,  $r = .06$ ) were reported as more appropriate for mothers in baseball. Sitting or standing quietly during the game was also significantly different in appropriateness, with parents reporting it as more appropriate for mothers in ice hockey than baseball ( $t(924.801) = 5.244$ ,  $p = .000$ ,  $r = .17$ ). The means were very low (under 1.10) for all poor behaviors except coaching from the sidelines (ice hockey = 1.51, baseball = 1.83) and effect sizes were small (see Table E16 for all results).

A similar pattern of acceptability was found with fathers' behaviors on baseball and ice hockey sidelines. Parents reported it was more appropriate for ice hockey fathers to yell at athletes ( $t(678.418) = 2.113$ ,  $p = .035$ ,  $r = .08$ ), verbally get into it ( $t(697.918) = 2.247$ ,  $p = .025$ ,  $r = .08$ ), encourage athletes to play rough ( $t(617.717) = 2.639$ ,  $p = .009$ ,  $r = .11$ ), and sit or stand quietly ( $t(1030) = 4.597$ ,  $p = .000$ ,  $r = .14$ ). Baseball parents reported that it was more appropriate than ice hockey parents reported for fathers to coach from the sidelines ( $t(958.997) = -5.559$ ,  $p = .000$ ,  $r = .18$ ). Again the means were all similar to the means reported for mothers and the effect size was small. Table E17 has all results.

**The stakes.** Participants were asked about an occurrence (either athlete unsportsmanlike behavior, parent unsportsmanlike behavior, referee/umpire incompetence, or coach incompetence) in a high and low stakes situation. Following

research question 5 (do the stakes influence youth sport parents' report of the frequency of their own and other parents' behaviors and acceptability of other parents' behaviors on youth sport sidelines?), three hypotheses were proposed that are examined in this section. Results were obtained using paired-samples t-tests for each behavior. Results for each occurrence and each sport are reported separately in this section, with effect sizes ( $r$ ) for all significant differences.

***Hypothesis 5a.*** The first hypothesis about the stakes was that sport parents would perceive poor sideline behaviors by other parents as occurring significantly more frequently in high stakes situations than in low stakes situations. Since the questions about other parent behavior were asked about mothers and fathers separately, the results for this question will be reported in that manner.

*Baseball participants.* In situations of athlete unsportsmanlike behavior, participants reported that they thought other parents would be significantly more likely to display some of the poor behaviors in high stakes situations. Participants reported that mothers would be more likely to yell at athletes on the field ( $t(152) = -2.038, p = .043, r = .01$ ), act in an embarrassing way ( $t(149) = -2.897, p = .004, r = .02$ ), act like a bad sport ( $t(152) = -2.100, p = .037, r = .01$ ), yell at the umpire ( $t(152) = -2.682, p = .008, r = .02$ ), yell at coaches ( $t(149) = -2.644, p = .009, r = .02$ ), physically get into it ( $t(151) = -2.358, p = .040, r = .02$ ), encourage athletes to play rough ( $t(150) = -2.605, p = .010, r = .02$ ) and outside the rules ( $t(152) = -2.700, p = .008, r = .02$ ), use profanity loud enough to hear ( $t(150) = -2.300, p = .023, r = .01$ ), and distract athletes from focusing on the

game ( $t(152) = -2.242, p = .026, r = .01$ ; see Table E18 for all significant and non-significant results) in high stakes situations.

Participants reported that in high stakes situations, they thought fathers would be more likely to act in an embarrassing way ( $t(151) = -3.002, p = .003, r = .01$ ), act like a bad sport ( $t(150) = -3.579, p = .000, r = .01$ ), yell at the umpire ( $t(151) = -2.253, p = .026, r = .01$ ), physically get into it ( $t(152) = -2.087, p = .039, r = .01$ ), and encourage athletes to play outside the rules ( $t(149) = -3.400, p = .001, r = .01$ ). All results for reported father behavior are listed in Table E19. Effect sizes for all significant dependent variables were very small, between .01-.02.

In the occurrences of parent unsportsmanlike behavior, parents did not report any behaviors happening more frequently in high stakes than low stakes situations, for both mothers and fathers. Tables E20-21 have all the results for parent unsportsmanlike behavior situations.

In occurrences of coach incompetence however, there were significant differences in almost all reported behaviors for mothers and fathers between high and low stakes situations. Mothers were reported as more likely to display the following behaviors in high stakes situations (see Table E22 for all results): yelling at athletes ( $t(163) = -4.101, p = .000, r = .01$ ), acting in an embarrassing way ( $t(163) = -5.912, p = .000, r = .01$ ), acting like a bad sport ( $t(159) = -6.200, p = .000, r = .01$ ), yelling at the umpire ( $t(159) = -6.549, p = .000, r = .01$ ), yell at the coaches ( $t(163) = -5.590, p = .000, r = .01$ ), verbally get into it ( $t(163) = -5.464, p = .000, r = .01$ ), coaching from the sidelines ( $t(162) = -4.603, p = .000, r = .01$ ), encouraging athletes to play rough ( $t(162) = -4.015, p = .000, r = .01$ ).

= .01), encouraging athletes to play outside the rules ( $t(162) = -3.580, p = .000, r = .01$ ), using profanity loud enough for athletes to hear ( $t(155) = -3.025, p = .003, r = .01$ ), distracting athletes from the game ( $t(159) = -2.764, p = .006, r = .01$ ), and yelling something offensive ( $t(161) = -4.660, p = .000, r = .01$ ). In addition, participants thought that mothers would be significantly less likely to cheer for good play in a high stakes situation of coach incompetence compared to a low stakes situation ( $t(162) = 3.642, p = .000, r = .01$ ).

Fathers were reported to be more likely to display all poor behaviors in a high stakes situation compared to a low stakes situation of coach incompetence, including yelling at athletes ( $t(163) = -3.874, p = .000, r = .01$ ), acting in an embarrassing way ( $t(162) = -5.422, p = .000, r = .01$ ), acting like a bad sport ( $t(161) = -5.274, p = .000, r = .01$ ), yelling at the umpire ( $t(159) = -4.167, p = .000, r = .01$ ), yell at the coaches ( $t(162) = -6.078, p = .000, r = .01$ ), verbally get into it ( $t(163) = -5.798, p = .000, r = .01$ ), physically get into it ( $t(162) = -2.647, p = .009, r = .01$ ), coaching from the sidelines ( $t(163) = -3.165, p = .002, r = .01$ ), encouraging athletes to play rough ( $t(163) = -3.445, p = .001, r = .01$ ), encouraging athletes to play outside the rules ( $t(161) = -2.763, p = .006, r = .01$ ), using profanity loud enough for athletes to hear ( $t(160) = -2.572, p = .011, r = .01$ ), distracting athletes from the game ( $t(160) = -3.467, p = .001, r = .01$ ), and yelling something offensive ( $t(161) = -3.769, p = .000, r = .01$ ). As with mothers' behavior, participants also thought that fathers would be significantly less likely to cheer for good play in a high stakes situation ( $t(162) = 2.798, p = .006, r = .01$ ) than a low stakes situation of coach incompetence (see Table E23).

Similar to occurrences of coach incompetence, in the high stakes situation of umpire incompetence parents reported significant differences in almost all behaviors for both mothers and fathers. Behaviors that were worse in the high stakes situation for mothers were yelling at athletes ( $t(159) = -4.575, p = .000, r = .01$ ), acting in an embarrassing way ( $t(157) = -6.429, p = .000, r = .01$ ), acting like a bad sport ( $t(156) = -5.661, p = .000, r = .01$ ), yelling at the umpire ( $t(158) = -5.906, p = .000, r = .01$ ), yelling at the coaches ( $t(156) = -4.244, p = .000, r = .01$ ), verbally getting into it ( $t(157) = -4.793, p = .000, r = .01$ ), physically getting into it ( $t(157) = -3.035, p = .003, r = .01$ ), coaching from the sidelines ( $t(159) = -3.922, p = .000, r = .01$ ), encouraging athletes to play rough ( $t(158) = -2.630, p = .009, r = .01$ ), and outside the rules ( $t(156) = -2.898, p = .004, r = .01$ ), using profanity ( $t(157) = -4.770, p = .000, r = .01$ ), distracting athletes ( $t(157) = -3.713, p = .000, r = .01$ ), and yelling something offensive ( $t(158) = -2.274, p = .024, r = .01$ ). All the positive behaviors (cheering for good play, cheering for effort, and sitting or standing quietly) were not reported significantly differently in high and low stakes situations (see Table E24 for all results).

For fathers, parents reported the following behaviors more likely to happen in a high stakes situation of umpire incompetence: yelling at athletes ( $t(159) = -5.223, p = .000, r = .01$ ), acting in an embarrassing way ( $t(159) = -5.607, p = .000, r = .01$ ), acting like a bad sport ( $t(158) = -6.301, p = .000, r = .01$ ), yelling at the umpire ( $t(158) = -5.592, p = .000, r = .01$ ), yelling at the coaches ( $t(158) = -5.020, p = .000, r = .01$ ), verbally getting into it ( $t(159) = -4.946, p = .000, r = .01$ ), physically getting into it ( $t(159) = -3.445, p = .001, r = .01$ ), coaching from the sidelines ( $t(159) = -2.917, p = .004,$



$r = .01$ ), encouraging athletes to play rough ( $t(156) = -2.642, p = .009, r = .01$ ), using profanity ( $t(159) = -4.062, p = .000, r = .01$ ), distracting athletes ( $t(158) = -2.521, p = .013, r = .01$ ), and yelling something offensive ( $t(158) = -3.930, p = .000, r = .01$ ). There was no difference in reported likelihood of fathers encouraging athletes to play outside the rules, cheering for good play, cheering for effort, and sitting or standing quietly (Table E25 contains all results). For mothers and fathers in all occurrences, the mean frequencies for poor behavior were still quite low, only above 2 (*almost never*) for coaching from the sidelines and yelling at the umpire. For good behaviors, frequencies were just under 3 (*sometimes*) to mid-4 (*almost all the time*) for most situations.

*Ice hockey participants.* For most occurrences there were less reported differences between high and low stakes situations for ice hockey parents compared to baseball parents. In situations of athlete unsportsmanlike behavior, parents reported that mothers would be more likely to yell at coaches ( $t(102) = -3.373, p = .001, r = .32$ ), verbally get into it ( $t(101) = -3.303, p = .001, r = .31$ ), and coach from the sidelines ( $t(102) = -2.899, p = .005, r = .28$ ). For fathers, the only behavior that was significantly different was that parents reported higher likelihood for physically getting into it ( $t(102) = -2.004, p = .048, r = .19$ ) in a high stakes situation. The differences here are a small to medium effect size and the means are all under 2.60 (2 = *almost never*, 3 = *sometimes*) for mothers and fathers. Table E26 contains all results for mothers and Table E27 has all results for fathers.

There were some differences in behavior reported for parent unsportsmanlike conduct. For mothers, parents reported they would be more likely to yell at athletes on

the field ( $t(95) = -2.901, p = .005, r = .29$ ), act in an embarrassing way ( $t(96) = -3.322, p = .001, r = .32$ ), yell at the referee ( $t(96) = -3.883, p = .000, r = .37$ ) and coaches ( $t(96) = -2.831, p = .006, r = .28$ ), coach from the sidelines ( $t(96) = -2.894, p = .005, r = .28$ ), and swear loud enough for athletes to hear ( $t(95) = -2.157, p = .034, r = .22$ ). See Table E28 for all results. Parents reported that fathers would be more likely to yell at athletes ( $t(96) = -2.301, p = .005, r = .23$ ), referees ( $t(96) = -3.898, p = .000, r = .37$ ), and coaches ( $t(95) = -2.178, p = .032, r = .22$ ), coach from the sidelines ( $t(94) = -2.419, p = .018, r = .24$ ), and cheer for athlete effort ( $t(94) = -2.256, p = .026, r = .23$ ) in a high stakes situation of parent unsportsmanlike conduct. Means were between 2 (*almost never*) and 3 (*sometimes*) for all poor behaviors and were 3.60 (low stakes) and 3.81 (high stakes) for cheering for athlete effort. Effect sizes were small to medium (see Table E29 for all results).

In the occurrences of coach incompetence, parents reported that other parents were more likely to perform poor behaviors in a high stakes situation and positive behaviors in a low stakes situation. When asked about the potential behavior of mothers, the following behaviors were significantly different: yelling at athletes ( $t(103) = -7.923, p = .000, r = .62$ ), acting in an embarrassing way ( $t(103) = -9.916, p = .000, r = .70$ ), acting like a bad sport ( $t(102) = -10.669, p = .000, r = .73$ ), yelling at referees ( $t(101) = -10.203, p = .000, r = .71$ ) and coaches ( $t(102) = -7.314, p = .000, r = .59$ ), verbally getting into it ( $t(102) = -6.734, p = .000, r = .55$ ), coaching from the sidelines ( $t(103) = -7.876, p = .000, r = .61$ ), encouraging athletes to play rough ( $t(102) = -6.906, p = .000, r = .56$ ) and outside the rules ( $t(100) = -4.417, p = .000, r = .40$ ), cheering for good play ( $t$

(101) = 5.092,  $p = .000$ ,  $r = .45$ ), using profanity ( $t(102) = -5.665$ ,  $p = .000$ ,  $r = .49$ ), distracting athletes ( $t(103) = -4.653$ ,  $p = .000$ ,  $r = .42$ ), sitting or standing silently ( $t(103) = 2.719$ ,  $p = .008$ ,  $r = .26$ ), and yelling something offensive ( $t(103) = -4.469$ ,  $p = .000$ ,  $r = .40$ ). Effect sizes for these differences were medium to large for most behaviors, indicating a medium to large difference in the means (see Table E30 for all results).

Parents' responses to potential behaviors of fathers in situations of coach incompetence were that in high stakes situations, fathers would be more likely to yell at athletes ( $t(103) = -8.465$ ,  $p = .000$ ,  $r = .64$ ), act in an embarrassing way ( $t(103) = -9.191$ ,  $p = .000$ ,  $r = .67$ ), act like a bad sport ( $t(101) = -10.289$ ,  $p = .000$ ,  $r = .72$ ), yell at the referee ( $t(102) = -9.399$ ,  $p = .000$ ,  $r = .68$ ) and coaches ( $t(101) = -7.699$ ,  $p = .000$ ,  $r = .61$ ), verbally ( $t(102) = -7.432$ ,  $p = .000$ ,  $r = .59$ ) and physically get into it ( $t(103) = -3.480$ ,  $p = .001$ ,  $r = .32$ ), coach from the sidelines ( $t(102) = -7.383$ ,  $p = .000$ ,  $r = .59$ ), encourage athletes to play rough ( $t(102) = -7.285$ ,  $p = .000$ ,  $r = .59$ ) and outside the rules ( $t(103) = -5.216$ ,  $p = .000$ ,  $r = .46$ ), use profanity ( $t(102) = -5.946$ ,  $p = .000$ ,  $r = .51$ ), distract athletes ( $t(102) = -5.597$ ,  $p = .000$ ,  $r = .48$ ), and yell something offensive ( $t(101) = -6.373$ ,  $p = .000$ ,  $r = .54$ ). Parents reported that in a low stakes situation, fathers would be more likely to cheer for good play ( $t(103) = 4.959$ ,  $p = .000$ ,  $r = .44$ ). Again the effect sizes are almost all large (see Table E31 for all results).

Finally, in situations of referee incompetence the results were similar to in situations of coach incompetence. When reporting the likelihood of mothers' and fathers' behavior, poor behaviors were more likely to occur in a high stakes situation and positive behaviors in a low stakes situation. For mothers, parents reported a difference between

high and low stakes situations for yelling at athletes ( $t(110) = -4.969, p = .000, r = .43$ ), acting in an embarrassing way ( $t(108) = -5.710, p = .000, r = .48$ ), acting like a bad sport ( $t(107) = -5.505, p = .000, r = .47$ ), yelling at referees ( $t(110) = -4.614, p = .000, r = .40$ ) and coaches ( $t(109) = -4.898, p = .000, r = .42$ ), verbally getting into it ( $t(109) = -5.428, p = .000, r = .46$ ), physically getting into it ( $t(109) = -2.096, p = .038, r = .20$ ), encouraging athletes to play rough ( $t(110) = -4.192, p = .000, r = .37$ ) and outside the rules ( $t(110) = -5.249, p = .000, r = .45$ ), cheering for good play ( $t(110) = 2.142, p = .034, r = .20$ ), using profanity ( $t(108) = -4.737, p = .000, r = .41$ ), distracting athletes ( $t(109) = -2.722, p = .008, r = .25$ ), sitting or standing silently ( $t(108) = 2.123, p = .036, r = .20$ ), and yelling something offensive ( $t(109) = -4.324, p = .000, r = .38$ ). Means and standard deviations, as well as all non-significant results are listed in Table E32.

For fathers, parents reported a difference between high and low stakes situations for yelling at athletes ( $t(110) = -4.102, p = .000, r = .36$ ), acting in an embarrassing way ( $t(110) = -6.294, p = .000, r = .51$ ), acting like a bad sport ( $t(110) = -4.368, p = .000, r = .38$ ), yelling at referees ( $t(110) = -5.799, p = .000, r = .48$ ) and coaches ( $t(110) = -4.554, p = .000, r = .40$ ), verbally getting into it ( $t(110) = -4.336, p = .000, r = .38$ ), physically getting into it ( $t(110) = -3.966, p = .000, r = .35$ ), coaching from the sidelines ( $t(109) = -2.595, p = .011, r = .24$ ), encouraging athletes to play rough ( $t(110) = -3.402, p = .001, r = .31$ ) and outside the rules ( $t(110) = -3.966, p = .000, r = .35$ ), using profanity ( $t(110) = -3.345, p = .001, r = .30$ ), distracting athletes ( $t(109) = -2.858, p = .005, r = .26$ ), and yelling something offensive ( $t(108) = -3.140, p = .002, r = .29$ ). All results are listed in Table E33.

**Hypothesis 5b.** The second hypothesis related to the stakes of the game looked at what parents reported *they would be likely to do* in high and low stakes situations of each of the four occurrences. As with Hypothesis 5a, the results are broken down by occurrence since the data was collected separately for each occurrence. The hypothesis proposed here was:

Sport parents will be significantly more likely to consider personally displaying poor sideline behaviors in high stakes situations than in low stakes situations.

The next sections contain results for baseball and ice hockey parents.

*Baseball participants.* In occurrences of athlete unsportsmanlike conduct parents reported they would be significantly more likely to act in an embarrassing way ( $t(152) = -2.020, p = .045, r = .01$ ), act like a bad sport ( $t(150) = -2.541, p = .012, r = .02$ ), yell at the umpire ( $t(152) = -2.723, p = .007, r = .02$ ), and verbally get into it ( $t(152) = -2.540, p = .012, r = .02$ ) in a high stakes situation compared to a low stakes situation. When presented with high and low stakes situations of parent unsportsmanlike conduct, the only behavior that parents reported they would be more likely to do in the high stakes situation was to act like a bad sport ( $t(147) = -2.962, p = .004, r = .02$ ).

In high and low stakes situations of coach incompetence, parents reported the most difference in likelihood of displaying poor behavior. Parents reported they would be more likely to yell at athletes ( $t(161) = -3.077, p = .002, r = .02$ ), act in an embarrassing way ( $t(163) = -2.923, p = .004, r = .02$ ), act like a bad sport ( $t(161) = -4.784, p = .000, r = .03$ ), yell at the umpire ( $t(162) = -3.216, p = .002, r = .02$ ), yell at the coaches ( $t(161) = -3.563, p = .000, r = .02$ ), verbally get into it ( $t(162) = -3.303, p = .001, r = .02$ ), coach from the sidelines ( $t(161) = -3.351, p = .001, r = .02$ ), use profanity ( $t(163) = -3.423, p =$

.001,  $r = .02$ ), distract athletes ( $t(158) = -3.230, p = .002, r = .02$ ), and yell something offensive ( $t(163) = -3.132, p = .002, r = .02$ ) and would be less likely to cheer for good play by both teams ( $t(163) = 3.607, p = .000, r = .02$ ) in the high stakes situation of coach incompetence. Finally, parents presented with high and low stakes situations of umpire incompetence reported being more likely to perform some poor behaviors, including yelling at athletes ( $t(159) = -3.663, p = .000, r = .02$ ), acting in an embarrassing way ( $t(157) = -4.075, p = .000, r = .02$ ), acting like a bad sport ( $t(158) = -4.830, p = .000, r = .03$ ), yelling at the umpire ( $t(158) = -5.778, p = .000, r = .03$ ), yelling at the coaches ( $t(158) = -2.209, p = .029, r = .01$ ), using profanity ( $t(159) = -2.227, p = .027, r = .01$ ), and distracting athletes ( $t(159) = -2.893, p = .004, r = .02$ ; Tables E34-37 contain all results for baseball parents for hypothesis 5b).

*Ice hockey participants.* In occurrences of athlete unsportsmanlike conduct, the only behavior that parents reported more likely to do in high stakes situations was yelling at athletes on the ice ( $t(102) = -2.200, p = .030, r = .21$ ; see Table E38 for all results). Parents who reported about situations of parent unsportsmanlike conduct reported they would be more likely to verbally get into it ( $t(96) = 2.227, p = .028, r = .22$ ) and sit or stand silently ( $t(95) = 2.478, p = .015, r = .25$ ) in a low stakes situation compared to a high stakes situation. All results are reported on Table E39.

When asked about high and low stakes situations of coach incompetence, there were differences in reports of several behaviors. Parents reported they were more likely to perform poor behaviors in a high stakes situation and positive behaviors in a low stakes situation. These behaviors included yelling at athletes ( $t(103) = -2.756, p = .000, r$

= .48), acting in an embarrassing way ( $t(103) = -4.229, p = .000, r = .48$ ), acting like a bad sport ( $t(102) = -3.472, p = .000, r = .48$ ), yelling at referees ( $t(102) = -5.339, p = .000, r = .48$ ) and coaches ( $t(103) = -2.802, p = .000, r = .48$ ), verbally getting into it ( $t(101) = -2.600, p = .000, r = .48$ ), coaching from the sidelines ( $t(103) = -5.780, p = .000, r = .48$ ), encouraging athletes to play rough ( $t(101) = -2.344, p = .000, r = .48$ ), cheering for good play ( $t(103) = 3.865, p = .000, r = .48$ ), using profanity ( $t(103) = -2.147, p = .000, r = .48$ ), and distracting athletes ( $t(102) = -2.281, p = .000, r = .48$ ). See Table E40 for complete results.

The occurrences of referee incompetence also elicited several differences in behavior between high and low situations. As with other occurrences, parents reported being more likely to display poor behaviors in high stakes situations and good behaviors in low stakes situations. Behaviors in which parents reported differences in this occurrence were: yelling at athletes ( $t(109) = -3.591, p = .000, r = .33$ ), acting in an embarrassing way ( $t(110) = -2.956, p = .004, r = .27$ ), acting like a bad sport ( $t(110) = -4.021, p = .000, r = .36$ ), yelling at referees ( $t(110) = -3.492, p = .001, r = .32$ ) and coaches ( $t(109) = -2.096, p = .038, r = .20$ ), coaching from the sidelines ( $t(110) = -2.605, p = .010, r = .24$ ), encouraging athletes to play rough ( $t(110) = -2.356, p = .020, r = .22$ ), cheering for good play ( $t(110) = 3.474, p = .001, r = .31$ ), using profanity ( $t(110) = -2.167, p = .032, r = .20$ ), and sitting or standing silently ( $t(110) = 2.625, p = .010, r = .24$ ; full results on Table E41).

**Hypothesis 5c.** The final hypothesis related to the stakes was about the acceptability of other parents' behaviors in high and low stakes situations of the four

different occurrences (athlete and parent unsportsmanlike conduct and coach and umpire incompetence). Specifically, it was hypothesized that:

Sport parents will be significantly more accepting of other parents' displays of poor sideline behaviors in high stakes situations than in low stakes situations.

*Baseball participants.* Overall there were very few behaviors that parents thought it was more acceptable to portray in high stakes situations. Of these behaviors, the acceptability was still quite low (usually very close to 1 or *never appropriate*, see Tables E42-49 for all baseball participant results). In high and low stakes situations of athlete unsportsmanlike conduct, there were no behaviors that parents thought were more acceptable for mothers to display in a high stakes situation and only one behavior that was reported as more acceptable for fathers to display in a high stakes situation. Interestingly, yelling at the umpire was slightly more acceptable in the high stakes situation for fathers only ( $t(150) = -2.020, p = .045, r = .01$ ).

In high and low stakes situations of parent unsportsmanlike conduct, parents thought it was more acceptable for mothers to act in an embarrassing way in a low stakes situation ( $t(145) = 2.493, p = .014, r = .02$ ) and that it was less acceptable for fathers to cheer for good play by both teams in a high stakes situation ( $t(147) = 2.238, p = .027, r = .01$ ). In the occurrences of coach incompetence three behaviors were reported as more acceptable by mothers in high stakes situations, including yelling at athletes ( $t(162) = -2.019, p = .045, r = .01$ ), acting like a bad sport ( $t(160) = -2.019, p = .045, r = .01$ ), and verbally getting into it ( $t(161) = -2.019, p = .045, r = .01$ ). No behaviors were reported as more acceptable for fathers to display in a high stakes situation of coach incompetence.



For the occurrences of umpire incompetence, there were no behaviors reported by parents as more acceptable in a high stakes situation.

*Ice hockey participants.* Like the baseball participants results, there were very few behaviors that parents reported were more acceptable in high or low stakes situations for either mothers or fathers to perform. In occurrences of parent unsportsmanlike conduct and referee incompetence, there were no behaviors that parents reported were more acceptable for mothers or fathers to do, regardless of the stakes. Tables E50 through E53 list full results for these situations. When asked about behaviors in situations of athlete unsportsmanlike conduct, parents reported no differences in acceptability of mothers' behaviors (see Table E54). Parents also reported it was more appropriate for fathers to cheer for good play ( $t(102) = -5.597, p = .000, r = .48$ ) and sit or stand silently ( $t(102) = -5.597, p = .000, r = .48$ ) in a high stakes situation versus a low stakes situation (see Table E55 for all results).

In the situations where coach incompetence occurred, parents reported it was more acceptable for mothers to yell at athletes ( $t(103) = -2.158, p = .033, r = .21$ ) and referees ( $t(102) = -2.360, p = .020, r = .23$ ) as well as cheer for athlete effort ( $t(101) = -2.408, p = .018, r = .23$ ) in a high stakes situation compared to a low stakes situation (see Table E56). Parents also reported that it was more appropriate for fathers to yell at referees ( $t(101) = -2.758, p = .007, r = .26$ ) and coaches ( $t(103) = -2.281, p = .025, r = .22$ ) and coach from the sidelines ( $t(103) = -2.568, p = .012, r = .25$ ) in the high stakes situation. All results are in Table E57.

**Type of occurrence.** The final research question focused on the different types of occurrences that have been previously reported as making parents angry on youth sport sidelines (Omli & LaVoi, 2012). These occurrences include referee/umpire incompetence, athlete unsportsmanlike conduct, coach incompetence, and parent unsportsmanlike conduct. The research question examined here was:

Does the type of occurrence influence youth sport parents' report of the frequency of their own and other parents' behaviors and the acceptability of other parents' behaviors on youth sport sidelines?

This research question was analyzed using one-way analysis of variance (ANOVA) and effect sizes ( $r$ ) were calculated where applicable.

The three hypotheses related to research question 6 are examined in the next sections for both baseball and ice hockey participants. Only high stakes situations were used for this research question because when differences were found in research question 5, poor behaviors were reported or considered not acceptable more often in the high stakes situations.

***Hypothesis 6a.*** The first hypothesis for research question 6 was that

Sport parents will perceive poor sideline behaviors as happening significantly more frequently in situations of referee/umpire incompetence compared to the other three situational occurrences (i.e. athlete unsportsmanlike conduct, coach incompetence, and parent unsportsmanlike conduct).

In each of the situations presented, participants were asked how likely they thought it was that mothers and fathers would portray each behavior listed. The following results compared the likelihood of parents portraying these behaviors with separate results for mothers and fathers. Baseball parent results are listed first followed by ice hockey parent results.

*Baseball participants.* Based on the hypothesis that in the high stakes situation of umpire incompetence there would be a higher likelihood of poor behavior, planned contrasts revealed six behaviors that mothers were more likely to display. Participants thought that mothers would be more likely to act in an embarrassing way ( $F(3, 341.760) = 11.388, p = .000; t(240.569) = 4.883, p = .000$  (one-tailed),  $r = .30$ ), act like a bad sport ( $F(3, 340.710) = 17.764, p = .000; t(237.214) = 5.484, p = .000$  (one-tailed),  $r = .34$ ), yell at the umpire ( $F(3, 341.864) = 37.921, p = .000; t(225.154) = 10.360, p = .000$  (one-tailed),  $r = .57$ ), encourage athletes to play rough ( $F(3, 342.045) = 4.769, p = .003; t(246.543) = 1.687, p = .047$  (one-tailed),  $r = .11$ ), use profanity ( $F(3, 337.338) = 4.169, p = .006; t(244.490) = 3.155, p = .001$  (one-tailed),  $r = .20$ ), and yell something offensive ( $F(3, 342.938) = 6.158, p = .000; t(263.330) = 2.228, p = .014$  (one-tailed),  $r = .14$ ). Based on the effect size criteria from Field (2005), the effect size for encouraging athletes to play rough, using profanity, and yelling something offensive are small, acting in an embarrassing way and acting like a bad sport are medium, and yelling at the umpire is large. Tables E58 and 59 contain all results for behavior of mothers discussed in this section.

There were seven behaviors that participants thought fathers would be more likely to display in occurrences of umpire incompetence, including acting in an embarrassing way ( $F(3, 344.742) = 8.922, p = .000; t(259.063) = 4.532, p = .000$  (one-tailed),  $r = .27$ ), acting like a bad sport ( $F(3, 618) = 11.541, p = .000; t(618) = 4.712, p = .000$  (one-tailed),  $r = .19$ ), yelling at the umpire ( $F(3, 618) = 36.765, p = .000; t(618) = 10.366, p = .000$  (one-tailed),  $r = .38$ ), yelling at the coaches ( $F(3, 343.587) = 7.826, p = .000;$

$t(251.596) = 2.026, p = .022$  (one-tailed),  $r = .13$ ), verbally getting into it ( $F(3, 619) = 10.710, p = .000$ ;  $t(619) = 2.419, p = .008$  (one-tailed),  $r = .10$ ), using profanity ( $F(3, 620) = 6.678, p = .000$ ;  $t(620) = 4.052, p = .001$  (one-tailed),  $r = .16$ ), and yelling something offensive ( $F(3, 342.917) = 9.652, p = .000$ ;  $t(252.028) = 3.449, p = .001$  (one-tailed),  $r = .21$ ). In terms of effect size, these results indicate a small effect for acting in an embarrassing way, acting like a bad sport, yelling at coaches, verbally getting into it, using profanity, and yelling something offensive, and a medium effect for yelling at the umpire (see Tables E60 and 61 for all results). This is much different than the results reported by ice hockey participants.

*Ice hockey participants.* There were only four behaviors that parents thought other parents would be more likely to display in a situations of referee incompetence compared to other situations that typically make parents angry on youth sport sidelines. When asked about the likely behavior of mothers, parents reported mothers would be more likely to yell at referees ( $F(3, 411) = 14.811, p = .000$ ;  $t(411) = 4.048, p = .000$  (one-tailed),  $r = .20$ ), use profanity ( $F(3, 409) = 2.970, p = .032$ ;  $t(409) = 1.863, p = .032$  (one-tailed),  $r = .09$ ), and yell something offensive ( $F(3, 407) = 3.592, p = .014$ ;  $t(407) = 2.360, p = .010$  (one-tailed),  $r = .12$ ) when they perceive referee incompetence. Parents reported fathers would be more likely to yell at referees ( $F(3, 411) = 11.737, p = .000$ ;  $t(411) = 3.783, p = .000$  (one-tailed),  $r = .18$ ) in a situation of referee incompetence than other situations. See Tables E62-63 for mothers' results and Tables E64-65 for fathers' results.

**Hypothesis 6b.** The second hypothesis related to type of occurrence proposed that parents be more likely to consider displaying poor behaviors in some types of occurrences. Specifically, this hypothesis stated:

Sport parents will be significantly more likely to consider displaying poor sideline behaviors in situations of referee/umpire incompetence compared to the other three situational occurrences.

Baseball parents and ice hockey parents were asked the likelihood of displaying different behaviors in each situation and the results are presented in the following sections.

*Baseball participants.* Five behaviors were reported as statistically significantly different between occurrences of umpire incompetence compared to the other types of occurrences. For one behavior (coaching from the sidelines) however, in occurrences of umpire incompetence this behavior was likely to be displayed less frequently than in other types of occurrences. The behaviors that parents reported they would be more likely to display in occurrences of umpire incompetence were acting in an embarrassing way ( $F(3, 341.707) = 4.194, p = .019; t(218.654) = 2.955, p = .002$  (one-tailed),  $r = .20$ ), acting like a bad sport ( $F(3, 337.770) = 11.403, p = .000; t(201.277) = 4.105, p = .000$  (one-tailed),  $r = .28$ ), yelling at the umpire ( $F(3, 334.538) = 29.043, p = .000; t(185.171) = 6.813, p = .000$  (one-tailed),  $r = .45$ ), and using profanity ( $F(3, 337.265) = 3.112, p = .014; t(212.535) = 2.055, p = .021$  (one-tailed),  $r = .14$ ). The effect size for acting in an embarrassing way, acting like a bad sport and using profanity was small and the effect size for yelling at the umpire was medium (see Tables E66-67 for all results).

*Ice hockey participants.* When asked about their own behavior, parents reported being more likely to display two poor behaviors during an occurrence of referee

incompetence than in the other occurrences. These behaviors are: acting like a bad sport ( $F(3, 225.779) = 2.665, p = .049; t(154.878) = 2.275, p = .012$  (one-tailed),  $r = .18$ ) and yelling at referees ( $F(3, 226.086) = 7.445, p = .000; t(162.416) = 2.174, p = .016$  (one-tailed),  $r = .17$ ). Verbally getting into it was least likely to occur during referee incompetence situations, in opposition to what was hypothesized. Tables E68-69 contain all results for ice hockey participants.

***Hypothesis 6c.*** The final hypothesis for research question 6 was:

Sport parents will be significantly more accepting of other parents' displays of poor sideline behaviors in situations of referee/umpire incompetence compared to the other three situational occurrences.

Again, for this hypothesis the reported acceptability of behaviors is separated between mothers and fathers based on the way the questions were asked in the survey. Baseball participant responses are discussed first here, followed by ice hockey participant responses.

*Baseball participants.* Baseball participants thought, for the most part, that displaying poor behavior was not more acceptable in occurrences of umpire incompetence compared to other occurrences. The only poor behavior that was more acceptable by mothers was yelling at the umpire ( $F(3, 327.574) = 3.462, p = .017; t(180.888) = 2.786, p = .003$  (one-tailed),  $r = .20$ ). Two other behaviors were significantly different in occurrences of umpire incompetence in a positive way. Cheering for athlete effort was reported as more acceptable by mothers ( $F(3, 336.257) = 2.744, p = .043; t(377.575) = 2.701, p = .004$  (one-tailed),  $r = .14$ ) when umpires were acting incompetently. Both behaviors had a small effect size. For both mothers and fathers,

coaching from the sidelines was significantly different and was reported as less acceptable in occurrences of umpire incompetence than other occurrences, contrary to what was predicted by the hypothesis. See Tables E70-73 for all results.

*Ice hockey participants.* Parents of ice hockey players reported no behaviors that were more appropriate when the referees acted incompetently compared to other occurrences. Tables E74-77 list all results for ice hockey parents. A discussion about what the results presented in this chapter mean in the context of the current study and previous sport parent sideline behavior research will be covered in the next chapter. Limitations of the present study and future directions for this line of research will also be considered.

## Chapter 5: Discussion and Conclusion

The final chapter will highlight the key findings from the present study and how these findings fit into the current body of research about parent sideline behavior in youth sport. The key takeaways and applications for sport administrators are discussed, as well as limitations and future directions. The application of each factor evaluated in this study from the Sport Parent Sideline Behavior Model will be considered next.

### Gender

Based on the literature review for the Sport Parent Sideline Behavior Model, there was an indication that gender may or may not influence sideline behavior. The present study confirmed these results as there were differences in only some reported behaviors depending on gender. In the first research question parents were asked about their own behavior and the results of mothers and fathers were compared. When there was a difference between mothers and fathers, fathers always behaved worse than mothers in both baseball and ice hockey samples, which is consistent with previous studies indicating either no difference or more poor behavior from fathers than mothers (Blom & Drane, 2008; Bowker et al., 2009; Dorsch et al., 2009; Hennessy & Schwartz, 2007; Jeffery-Tosoni et al., 2015). This included reporting more frequent poor behaviors and less frequent good behaviors from fathers as compared to mothers. There were fewer behaviors where differences were reported in ice hockey (7) than baseball (13), however the effect sizes on all differences in baseball were .00-.01 compared to .14-.27 in ice hockey. This indicated that although the differences were statistically significantly



different between parents, the actual difference was not necessarily significant in a practical way.

With the exception of the behavior coaching from the sidelines, poor behaviors were reported at 1.5 or less on the Likert scale from 1 (*never*) to 5 (*always*). This means parents were reporting displaying poor behaviors *never* or *almost never* in both sports, which is a positive finding for both samples. This is consistent with previous results regarding 23 parents' sideline behavior (Omli & LaVoi, 2009). Coaching from the sidelines was reported at around 2, which is still *almost never* and therefore not happening that frequently, according to the participants. Looking at the good behaviors that parents were asked about, there was no reported difference between mothers' and fathers' reports of sitting or standing silently and clapping only when an athlete (or the team) does something good in either baseball or ice hockey, however this behavior was reported less frequently (around 3 = *sometimes*) than other good behaviors (4 = *almost all the time* or higher). Athletes report wanting parents to display this type of behavior (Jeffery-Tosoni et al., 2015; Omli & Wiese-Bjornstal, 2011) therefore this may be an area where parents could be educated as many parents may not realize this is a good sideline behavior.

In addition to looking at the respondents' own gender, participants in this study were asked about the behavior of other mothers and fathers separately rather than as a single variable. Gender in sport sideline behavior is usually only examined from one perspective, either observing the behavior of mothers compared to fathers or asking males and females about own behavior (e.g., Bowker et al., 2009; Dorsch et al., 2009;

Hennessey & Schwartz, 2007; Jeffery-Tosoni et al., 2015), therefore by examining gender from both perspectives in one study a unique contribution can be made to sport parents sideline behavior research. Based on the research cited in the previous section, it was hypothesized here that parents would perceive fathers as behaving more poorly than mothers and be more accepting of fathers' displays of poor behavior.

The first hypothesis was confirmed in the current study as there was a significant difference between both baseball and ice hockey for all reported behaviors of mothers and fathers, with the exception of hockey parents acting in a way that was embarrassing. As predicted, parents reported that fathers displayed poor behaviors more frequently and good behaviors less frequently than mothers. This aligns with the research cited above that found fathers being more likely to display poor behavior and males being more likely to consider aggressive acts (Wann et al., 2003). The reported frequency of poor behaviors was higher and good behaviors was lower than when parents reported on their own behavior but was still 1.5-2 for most poor behaviors (*never* to *almost never*) and 3-4 for most good behaviors (*sometimes* to *almost all the time*). The discrepancy between self-report and reporting the behavior of others can happen in this type of research (Creswell, 2009) and therefore the reports of other parents' behaviors may portray a more accurate picture of what the sidelines look like in youth ice hockey and baseball.

The hypothesis regarding acceptability of behaviors on sidelines was not confirmed in this study. Parents did not report a difference in the acceptability of any behaviors displayed by mothers compared to fathers, with the exception of hockey parents reporting it to be more appropriate for fathers to yell something offensive to, or

about someone, than mothers. Of note however is that all poor behaviors except coaching from the sidelines was reported under 1.10, meaning parents overall think most poor behaviors are *never appropriate*. Coaching from the sidelines was reported slightly higher (about 1.5 by ice hockey parents and about 1.8 by baseball parents) meaning it was still seen as less than *appropriate once in a while*. Of the good behaviors reported on in this study, parents thought it was less acceptable to sit or stand silently (mean score for both sports was about 3.5, indicating between *sometimes appropriate* and *usually appropriate*) compared to the other good behaviors (mean score = 4.8, indicating *always appropriate*). This confirms the previous assertion that parents should be educated about why sitting or standing silently is a good behavior on youth sport sidelines. The other personal variable examined in this study was sport experience, where a new variable was used to examine sport parent sideline behavior.

### **Sport Experience**

The sport experience variable was a unique variable created specifically for this research study. It was hypothesized that parents with different levels of knowledge and/or playing experience may act differently based on research about fan identification (Wann, Carlson, et al., 1999), previous sport knowledge (Randall & McKenzie, 1987; Wiersma & Fifer, 2008) and playing experience but no direction was hypothesized for the differences. Ten behaviors were reported to occur significantly differently between high and low experienced baseball parents and 4 behaviors were reported differently for ice hockey parents. As with the results when examining gender differences, poor behaviors were reported relatively infrequently (about 1.5, or between *never* and *almost never*) and

good behaviors were about 4 (*almost all the time*). Although there were more significant results for baseball parents compared to ice hockey parents, the effect sizes for all baseball parent differences were under .03, indicating very little practical significance. Effect sizes for hockey parent behavior were small. An interesting and novel finding in this section of the study is that when differences were reported, parents with high sport experience were more likely to act poorly and less likely to display good behaviors. The sport experience variable in this study was used as an alternative to the fan identification variable (Wann, Carlson, et al., 1999) but the results here show similar findings in that when there were behavior differences, high sport experience parents were more likely to display poor behavior, much like highly identified fans (Wann, Carlson, et al., 1999; Wann et al., 2003).

There was little difference in reports of the acceptability of poor behaviors displayed by other parents between high and low sport experienced parents. Ice hockey parents only reported a difference for fathers in one behavior and there were no differences for mothers. Baseball parents reported four behaviors differently for mothers and six for fathers. When reporting acceptability of behaviors, parents with high sport experience were more likely to think poor behaviors were appropriate, although all means were under 2 or *appropriate once in a while*. Another unique contribution of this research was the examination of sideline behavior differences between sports, which will be discussed next.

## Type of Sport

Whenever I tell someone the topic of my dissertation, the response is almost always some form of the statement, “hockey parents are the worst parents!” Prior to this study, there was no evidence that this was the case, other than anecdotal experiences from those involved in sport. The results from this study indicate that generally, hockey parents behave more poorly than baseball parents, although overall the levels of poor behavior are not very high. The hypotheses for this research question were based mainly on research that indicated viewing a more aggressive sport (hockey) could elicit more poor behavior compared to a less aggressive sport, in this case baseball (Anderson & Bushman, 2002; Coakley, 2009a; Jamieson & Orr, 2009; Ward Jr., 2002). When asked about the behavior of other parents, there was a significant difference in the report of every behavior for fathers and all but two behaviors for mothers. Behavior reports for hockey parents were always worse than reports on baseball parents, except in the case of fathers sitting or standing quietly where baseball parents reported fathers displaying this less frequently than hockey parents reported. Again, the mean scores reported were not alarmingly high as all poor behaviors had a score under 3 (*sometimes*) for ice hockey and usually under 2 (*almost never*) for baseball parents. Based on effect size, the strongest difference reported for mothers was yelling at athletes on the ice/field (ice hockey = 2.40, baseball = 1.67,  $r = .43$ ) and the strongest difference reported for fathers was encouraging athletes to play rough (ice hockey = 2.38, baseball = 1.63,  $r = .44$ ).

When asked about the frequency of their own behavior, differences were reported for all but three behaviors (encouraging athletes to play outside the rules, using profanity

loud enough for athletes to hear, and showing up to a practice or game intoxicated). For the most part, ice hockey parents reported displaying poor behavior more frequently and good behavior less frequently, with the exception of coaching from the sidelines, distracting athletes from focusing on the game, and sitting or standing quietly. Poor behaviors were reported infrequently in both sports (usually under 2 or *almost never*) and based on effect size the strongest difference was between yelling at the umpire/referee (ice hockey = 1.38, baseball = 1.17,  $r = .22$ ). Following the call of Gould and colleagues (2008), this study provides sport specific comparisons to better understand the culture of ice hockey and baseball in western Canada.

There were few reported differences in the acceptability of poor behavior between ice hockey and baseball parents. For the most part, acceptability for poor behaviors was low (close to 1 or *never appropriate*) and the significant differences had no to small effect sizes. The strongest difference in acceptability for both mothers and fathers was for coaching from the sidelines, where parents reported more acceptability for this behavior on baseball sidelines than ice hockey sidelines. Appropriateness of coaching from the sidelines was still fairly low (under 2 or *appropriate once in a while*), which is a good sign. Continuing with situational factors, the next variable examined was the stakes.

### **The Stakes**

Another unique contribution of this study was the examination of a concept only previously studied in college and professional sport—the stakes. Based on the frustration-aggression theory (Wann, Carlson, et al., 1999; Ward Jr., 2002) and related research (Blom & Drane, 2008; Holt et al., 2008; Wann et al., 1994), I hypothesized that parents

would display and be more accepting of poor behavior when the stakes of the game were higher. This was true in some cases but not across all situations. When parents were asked about the frequency of poor behavior of other parents, there were differences in reported behavior between high and low stakes situations much more often in occurrences of coach and referee/umpire incompetence than in occurrences of athlete and parent unsportsmanlike conduct. The results were similar for both ice hockey and baseball. This trend continued when parents were asked about their own behavior in high and low stakes situations. When there were differences in reported behavior of themselves or others, parents almost always said behavior was worse in high stakes situations, which supports Wann, Carlson, et al.'s (1999) theory that when there is more at stake fans are more likely to act poorly. It is important to note here however that even when there was a significant difference in frequency of poor behavior, it was still relatively low (around 2 (*almost never*) or less for baseball and around 3 (*sometimes*) or less for ice hockey). There was rarely any reported differences in frequency of good behavior in either sport, and most notably there was only one situation (parents reporting on hockey fathers' behavior in situations of parent unsportsmanlike conduct) where participants said they or other parents would cheer less for athlete effort. This is a positive finding as support for athletes should not be contingent on a particular situation, rather parents should always support and cheer for athletes.

In terms of acceptability of poor behavior, parents reported virtually no differences in accepting poor behavior regardless of the situation or gender of parent. When differences were present, poor behavior was more likely to accepted in high stakes

situations but it was almost always under 2 or *appropriate once in a while*. The findings about stakes are important because although it seems intuitive that parents would act more poorly in high stakes situations, there are few studies that have addressed this at a youth sport level and none that have specifically asked parents to compare situations like they were asked to in this study. We can see that when parents do change behavior it is usually for the worse in the high stakes situations but it is not happening all the time. In particular because changes in behavior are more likely high stakes situations of coach and referee/umpire incompetence, sport administrators should be pay particular attention to this and target parent education to this issue.

### **Type of Occurrence**

The final variable examined in this study was type of occurrence, specifically if situations of referee/umpire incompetence elicited worse behavior and more acceptance for bad behavior than other situations based on work by Omli and LaVoi (2012). Overall these hypotheses were not supported in the present research study. Baseball parents were more reactionary than ice hockey parents as there were more behaviors that baseball parents said they or others would act differently compared to hockey parents. Yelling at the referee/umpire was the behavior that was reported as occurring most often by other baseball and ice hockey parents, however it was still relatively infrequent (2.47-3.01, *almost never – sometimes*). In situations other than referee/umpire incompetence where one behavior was reported more frequently than other behaviors, yelling at athletes on the field/ice, verbally and physically ‘getting into it,’ and cheering for athlete effort were reported to occur more or less often depending on situation. Parents reported other



parents being more likely to yell at athletes when athlete unsportsmanlike conduct was displayed and to verbally or physically get into it when parent unsportsmanlike conduct occurred. An interesting finding was also that for some groups of parents, they said other parents would be less likely to cheer for athlete effort in situations of athlete unsportsmanlike conduct. As noted in previous sections of this discussion, parents should be cheering for athlete effort regardless of the situation, not cheering for athletes contingent on in-game occurrences.

When looking at how acceptable different behaviors were in different situations, there was very little difference in levels of acceptance in either baseball or ice hockey. Where differences were found there was still little acceptance for poor behavior, as seen by scores of 2 (*appropriate once in a while*) or less. Overall it appears that parents recognize that poor behaviors are not appropriate in any circumstance and that good behaviors should be displayed all the time. One notable exception here is the behavior sitting or standing quietly and clapping only when an athlete (or team) does something good. In all situations in both sports this behavior was rated as less appropriate (a score of about 3—*sometimes appropriate*—in baseball and about 3.5 in ice hockey) than other good behaviors that averaged 4.5 or higher (4 = *usually appropriate*, 5 = *always appropriate*).

### **Applications for Sport Administrators**

Looking at this study as a whole, there are several key takeaways that sport administrators in baseball and ice hockey can take and use to educate the parents in their organization. First, parent behavior overall is not as egregious as common perceptions

lead us to think. Even when differences were found, whether it be between genders, in high and low stakes situations, in different occurrences, or between different types of sports, parents reported for themselves and other parents that displaying poor behaviors was happening relatively infrequently and they were not accepting of poor behaviors regardless of the situation. While there were some differences that were noted in the preceding sections, parent behavior is largely good and administrators should acknowledge this to the parents in their organization. That being said, there are some areas where improvements can be made.

There are four areas in particular where parents could improve behavior. First, parents should be encouraged to stop coaching from the sidelines. Not only is this distracting to athletes, but it can also be counterproductive to what a coach is trying to teach the athletes (Kidman et al., 1999). Second, while physically ‘getting into it’ was not reported as happening very often, it should not be happening ever. In these types of situations, it is possible that poor behavior moves from being a league problem to being a legal issue which can ultimately end the youth sport experience for some children if their parents are acting in this manner. Third, of the good behaviors reported on in this study, sitting or standing quietly and clapping or cheering when something good happens was reported less frequently than other good behaviors and parents generally thought this behavior was less acceptable than other good behaviors. The fact that this behavior is less accepted may indicate that parents do not understand the importance of this kind of behavior. This is an important area where league administrators could educate parents on the importance of sitting or standing quietly and cheering when something good happens.

Athletes report wanting parents to behave in this manner (Jeffery-Tosoni et al., 2015; Omli & Wiese-Bjornstal, 2011) and if poor behaviors such as yelling at the referee/umpire or coaching from the sidelines are happening even sometimes on youth sport sidelines, it would not be possible for parents to also sit or stand quietly.

Encouraging sitting or standing quietly may reduce the amount of other yelling or coaching from the sidelines, thereby reducing the background anger that young athletes, and everyone else, are potentially exposed to on youth sport sidelines.

Finally, the results that show that there are not many differences in behavior based on situation, but when there were differences it should be addressed. Good behaviors like cheering for athlete effort, should not be contingent on the situation (Vealey, 2005) and this should be addressed by league administrators. The parents' role in youth sport is partially as a support system and this support should not be contingent on situations. Additionally, administrators can raise awareness that situations of coach and referee/umpire incompetence tend to elicit more poor behavior and encourage parents to be more aware in these types of situations of the consequences to athletes when they behave poorly. Elliott and Drummond (2015) argue that policies for parent behavior are not sufficient in creating changes in parent behavior, but that policies need to be combined with education. The results from this study can be part of that education to help with behavior change in parents on youth sport sidelines.

### **Limitations**

As with any study, there were limitations to the present study that should be noted, particularly around survey length, who participated in the survey, and limits to

generalizability. The survey was very long and although the decision was made to have parents only respond to a randomized part of the last section of the survey, most participants took 20-30 minutes or more to complete the survey. This led to survey abandonment by many participants which may have influenced the overall results. The number of participants was still much higher than previous sport parent sideline behavior studies, but shorter surveys in the future may increase the total number of participants. To shorten the survey, one strategy might be to use only the top two or three poor behaviors and leave blanks for parents to fill in additional behaviors that they are specifically concerned about rather than listing so many behaviors. Another strategy could be to tailor the behaviors listed on surveys to sport organizations based on reported problems according to athletes, administrators, officials, or parents.

One finding was that parents tended to report performing poor behaviors less frequently compared to their perceptions of other parents' behavior on the sidelines. This may be due to different reasons, or a combination of these reasons. Parents may not recognize their own behaviors, such as not really thinking about how often they yell at the referee or rationalize that it was only when a particularly bad call was made that they yelled at the referee. Parents may underestimate their own poor behaviors on purpose or by simply being unaware of how they are acting. This has been seen in other research, where parents report less poor behavior compared to what athletes and other parents report. The difference in response may also be because the parents who chose to participate in the study actually do display fewer poor behaviors compared to other parents. The survey was sent to all parents but not all parents chose to participate. It is

possible that parents who participated are more aware of the topic and either always displayed less poor behavior or have improved their behavior as a result of their awareness. Likely this limitation is a result of a combination of these factors and is part of conducting this type of research. Observational research may be more reliable in reporting exactly how often parents are performing different behaviors, but the results from the present study align with previous research that found poor behavior was relatively uncommon (e.g., Bowker et al., 2009). Finally, this research study has limited generalizability. The sample size was large, especially relative to previous sport parent sideline behavior studies, therefore we can be confident this accurately represents the populations studied here—parents from two provincial sport organizations in western Canada. Applying these results to parents in other provinces or states, or in other sports, should be done with caution.

### **Future Directions**

The present study extended the current body of research in both sport management and sport psychology, but there are more areas that could be examined related to sport parent sideline behavior in youth sport. This study was limited to two sports, so future research studies could examine additional sports, in particular individual sports since this study only looked at team sports. It may be useful to study different age groups as this study grouped all athletes together for analysis. This may be difficult as many parents have more than one athlete in a given sport but certainly could be useful in targeting education to certain groups of parents.

Building on this study and continuing to use an ecological model approach, a multi-case study method (Henriksen, 2010) may be a productive next step in further developing the Sport Parent Sideline Behavior Model. The multi-case study method involves case studies in environments that are more or less successful in the area studied, in the case, good parent sideline behavior. Programs with especially good or poor parent sideline behavior could be identified and examined through an in-depth case study, then the results used to further develop the ecological model.

The purpose of this study was to combine theory from two previously separate bodies of research and gather preliminary data about youth sport spectator behavior and various potential influences. Now that there is a framework for understanding research (Sport Parent Sideline Behavior Model) it is possible to examine other influences identified in the model that have not previously been examined and to use the model to inform interventions aimed at improving parent behavior. One influence that could be examined is the gender of the athlete in relation to parent behavior. Traditional gender roles would indicate that aggression on the field or rink would be more acceptable for boys than girls, and this is even within the rules for ice hockey. At the highest level of competition, for example, checking is permitted for men but not for women. If more aggression is allowed or encouraged for boys, parents of boys may also be more willing to display or accept poor sideline behavior, similar to more willingness to display or accept poor behavior in aggressive compared to nonaggressive sports. For future research studies, the data gathered here could be used for an intervention aimed at improving parent behavior. Parent behavior could be observed by researchers and/or reported on by

athletes, parents, coaches, administrators, and referees, then parents could be given an education program based on the results of this study and specific issues identified by initial observations and reports. A second round of observations could then be conducted to determine the effectiveness of the education program. Education programs should focus on parent behavior specifically, not on parenting, since previous research (Vincent & Christensen, 2015) has revealed that parents feel they are experts on their own child and are less receptive to education that they perceive is telling them how to parent.

### **Conclusion**

Although sport parent sideline behavior is not the epidemic sometimes portrayed in the media, there is certainly room for improvement for the betterment of the youth sport experience. In this study there were several key findings about sport parent sideline behavior that can improve parent education and in turn youth sport sidelines. First, fathers were more likely to display poor behaviors than mothers, although overall there was no difference in acceptability of any poor behaviors displayed by either mothers or fathers. One notable exception was the presence and increased acceptability of coaching from the sidelines by both mothers and fathers, which should be a target of future parent education in both baseball and ice hockey. Second, parents with higher sport experience were more likely to display poor behaviors compared to parents with less sport experience. Looking at sport type, when differences were found, hockey parents typically displayed worse behavior than baseball parents. Finally, looking at specific situations there were few differences in behaviors between situations, although when there were differences parents tended to act worse during high stakes situations. There were virtually

no differences in acceptability of behavior in specific situations (high or low stakes), indicating that parents are aware that their behavior *shouldn't* be different depending on circumstances, even if that is what they are displaying.

The findings from this study, apart from being of interest to youth sport coaches and administrators, are significant in building the body of knowledge on this topic, developing a framework for understanding and guiding future research, and answering the calls of researchers in previous studies in this field. In this study, research from both sport psychology and sport management were used to guide the research questions and create the hypotheses. The results extend the current sport spectator research from the sport management field by adding a new context—youth sport—and extends existing sport psychology based sport parent research with a different use of the gender variable (i.e., both from the perspective of mothers and fathers, reporting on the behaviors of mothers and fathers separately), the creation of a new sport experience variable that captures sport background in a new way, and data from the perspective of parents rather than from athletes or coaches. In addition, previously athletes reported their perceptions of parent sideline behavior (Omli & Wiese-Bjornstal, 2011), and this study provides complementary data on parents' perceptions of behavior on youth sport sidelines.

The theoretical framework used in this study is a combination of an ecological systems model (Bronfenbrenner, 1977) and the general aggression theory (Anderson & Bushman, 2002). Together these theories were merged to create the Sport Parent Sideline Behavior Model which was used to survey and organize existing sport parent sideline behavior research and guide the development of this study. This model can now be used



to develop further related studies. This study was also an answer to calls from researchers in previous studies. This study examined the context of sport parent sideline behavior in an attempt to move from observing *what* parents were doing to understanding *why* parents were acting in particular ways (Holt & Knight, 2014). Additionally, there were two sports specifically examined, rather than just looking at sport generally. This comes from a call by Gould et al. (2008) to examine sports individually since the culture of a particular sport may elicit different behaviors and therefore different ways to combat poor parent behavior.

Based on the present study, there are several factors identified that influence parent behavior on youth baseball and ice hockey sidelines. Personal factors, including gender and sport experience, as well as situational factors, such as type of sport, the stakes, and the behavior of others, all influence how parents behave to some extent. While it may not be possible to change the factors, parents can be educated about common problems and how their behavior impacts athletes. By bringing the consequences of poor parent behavior back to the effect on athletes, parents can hopefully see the importance of improving behavior on youth sport sidelines.

There are many potential positive outcomes of youth sport participation but children are not able to realize these benefits if they drop out and parent sideline behavior can be a contributing factor to this. As we learn more about this behavior and see trends in behavior across sports and different situations, we can educate parents and hopefully improve the experience of youth athletes in being able to gain as many positive benefits as possible from youth sport participation.

## References

- Acosta, R. V., & Carpenter, L. J. (2014). *Women in intercollegiate sport: A longitudinal, national study thirty-seven year update*.
- Active Healthy Kids Canada. (2014). Is Canada in the running? *The ParticipACTION Active Healthy Kids Canada Report Card on Physical Activity for Children and Youth*. Retrieved from [http://www.participaction.com/wp-content/uploads/2015/03/AHKC\\_2014\\_ReportCard\\_ENG.pdf](http://www.participaction.com/wp-content/uploads/2015/03/AHKC_2014_ReportCard_ENG.pdf)
- Active Healthy Kids Canada. (2015). The biggest risk is keeping kids indoors. *The ParticipACTION Active Healthy Kids Canada Report Card on Physical Activity for Children and Youth*. Retrieved from <http://www.participaction.com/wp-content/uploads/2015/03/2015-Report-Card-Full-Report-EN-FINAL.pdf>
- Anderson, C. A., & Bushman, B. J. (2002). Human aggression. *Annual Review of Psychology*, 53, 27–51.
- Arthur-Banning, S., Wells, M. S., Baker, B. L., & Hegreness, R. (2009). Parents behaving badly? The relationship between sportsmanship behaviors of adults and athletes in youth basketball games. *Journal of Sport Behavior*, 32(1), 3–18.
- Babkes, M. L., & Weiss, M. R. (1999). Parental influence on children's cognitive and affective responses to competitive soccer participation. *Pediatric Exercise Science*, 11, 44–62.
- Baysinger, T. (2010, August 27). Overzealous hockey dad released from prison. *Sports Grid*.
- Blom, L. C., & Drane, D. (2008). Parents' sideline comments: Exploring the reality of a growing issue. *Athletic Insight*, 10(3).
- 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(3), 301–316.
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, 32(7), 513–531.
- Brustad, R. J. (1996). Attraction to physical activity in urban schoolchildren: Parental socialization and gender differences. *Research Quarterly for Exercise and Sport*, 67(3), 316–323.
- Brustad, R. J. (2008). Qualitative research approaches. In T. S. Horn (Ed.), *Advances in sport psychology* (3rd ed., pp. 31–43). Champaign, IL: Human Kinetics.
- CBC News. (2015). Hockey parents must take "Respect in Sport" course on Vancouver Island. Retrieved from <http://www.cbc.ca/news/canada/british-columbia/hockey-parents-must-take-respect-in-sport-course-on-vancouver-island-1.3031071>
- CBS New York. (2012, September 26). N.J. dad arrested for allegedly punching fellow

parent at pee-wee football practice.

- Citizenship Through Sports Alliance. (2005). 2005 Youth Sports National Report Card. Retrieved from [http://www.aahperd.org/naspe/publications/teachingTools/upload/TACE\\_NationalGrades05.pdf](http://www.aahperd.org/naspe/publications/teachingTools/upload/TACE_NationalGrades05.pdf)
- Clarke, N. J., & Harwood, C. G. (2014). Parenting experiences in elite youth football: A phenomenological study. *Psychology of Sport and Exercise, 15*(5), 528–537. doi:10.1016/j.psychsport.2014.05.004
- Coakley, J. (2009a). *Sports in society: Issues and controversies* (10th ed.). New York, NY: McGraw-Hill.
- Coakley, J. (2009b). The good father: Parental expectations and youth sport. In T. Kay (Ed.), *Fathering through sport and leisure* (pp. 40–50). New York, NY: Routledge.
- Côté, J. (1999). The influence of the family in the development of talent in sport. *The Sport Psychologist, 13*, 395–417.
- Crane, J., & Temple, V. (2015). A systematic review of dropout from organized sport among children and youth. *European Physical Education Review, 21*(1), 114–131. doi:10.1177/1356336X14555294
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Thousand Oaks, CA: Sage Publications.
- Crossman, J. E. (1986). Age of spectators as a factor influencing behavior at minor league hockey and baseball games. *Perceptual and Motor Skills, 62*, 639–648.
- Cummings, E. M. (1987). Coping with background anger in early childhood. *Child Development, 58*(4), 976–84.
- Davies, M. J., Babkes Stellino, M., Nichols, B. A., & Coleman, L. M. (2016). Other-initiated motivational climate and youth hockey players' good and poor sport behaviors. *Journal of Applied Sport Psychology, 28*(1), 78–96. doi:10.1080/10413200.2015.1071297
- De Arth-Pendley, G., & Cummings, E. M. (2002). Children's Emotional Reactivity to Interadult Nonverbal Conflict Expressions. *The Journal of Genetic Psychology, 163*(1), 97–111.
- DeFrancesco, C., & Johnson, P. (1997). Athlete and parent perceptions in junior tennis. *Journal of Sport Behavior, 20*(1), 29–36.
- Dimmock, J. A., & Grove, J. R. (2005). Relationship of fan identification to determinants of aggression. *Journal of Applied Sport Psychology, 17*(1), 37–47. doi:10.1080/10413200590907559

- Domingues, M., & Gonçalves, C. E. (2013). The role of parents in talented youth sport: Does context matter? *Polish Journal of Sport and Tourism*, 20(2), 117–122. doi:10.2478/pjst-2013-0011
- Dorsch, T. E. (2013). *Parent sport socialization, goals and verbal sideline behavior, and support and pressure in organized youth sport*. Purdue University.
- 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(4), 444–68.
- 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*, 4(1), 19–35. doi:10.1037/spy0000025
- 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, 98–119. doi:10.1186/1479-5868-10-98
- El-Sheikh, M., & Cheskes, J. (1995). Background Verbal and Physical Anger: A Comparison of Children's Responses to Adult-Adult and Adult-Child Arguments. *Child Development*, 66(2), 446–458.
- El-Sheikh, M., & Cummings, E. M. (1992). Availability of Control and Preschoolers' Responses to Interadult Anger. *International Journal of Behavioral Development*, 15, 207–226.
- Elliot, S. K., & Drummond, M. J. N. (2013). A socio-cultural exploration of parental involvement in junior Australian Rules football. *Asia-Pacific Journal of Health, Sport and Physical Education*, 4(1), 35–48.
- Elliott, S., & Drummond, M. (2015). The (limited) impact of sport policy on parental behaviour in youth sport: A qualitative inquiry in junior Australian football. *International Journal of Sport Policy and Politics*, 7(4), 519–530.
- Field, A. (2005). *Discovering statistics using SPSS* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Fields, S. K. (2008). Sports. *Encyclopedia of Children and Childhood in History and Society*. Gale Group. Retrieved from <http://www.faqs.org/childhood/So-Th/Sports.html>
- Fields, S. K., Collins, C. L., & Comstock, R. D. (2007). Conflict on the courts: a review of sports-related violence literature. *Trauma, Violence, & Abuse*, 8(4), 359–69. doi:10.1177/1524838007307293
- Fossey, E., Harvey, C., McDermott, F., & Davidson, L. (2002). Understanding and evaluating qualitative research. *Australian and New Zealand Journal of Psychiatry*,

36, 717–732.

- Fredricks, J. A., & Eccles, J. S. (2004). Parental influences on youth involvement in sport. In M. R. Weiss (Ed.), *Developmental sport and exercise psychology: A lifespan perspective* (pp. 145–164). Morgantown, WV: Fitness Information Technology.
- Gilbert, W., & Trudel, P. (2004). Analysis of coaching science research published from 1970-2001. *Research Quarterly for Exercise and Sport*, 75(4), 388–399.
- Goldstein, J. D., & Iso-Ahola, S. E. (2008). Determinants of Parents' Sideline-Rage Emotions and Behaviors at Youth Soccer Games. *Journal of Applied Social Psychology*, 38(6), 1442–1462.
- Goodger, K., Gorely, T., Lavalley, D., & Harwood, C. (2007). Burnout in sport: A systematic review. *The Sport Psychologist*, 21, 127–151.
- Gould, D., Lauer, L., Rolo, C., Jannes, C., & Carolina, N. (2008). The Role of Parents in Tennis Success: Focus Group Interviews With Junior Coaches. *The Sport Psychologist*, 22, 18–37.
- Gould, D., Lauer, L., Rolo, C., Jannes, C., & Pennisi, N. (2006). Understanding the role parents play in tennis success: a national survey of junior tennis coaches. *British Journal of Sports Medicine*, 40(7), 632–636. doi:10.1136/bjism.2005.024927
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research* (1st ed., pp. 105–117). Thousand Oaks, CA: Sage.
- Harger, J., & El-Sheikh, M. (2003). Are children more angered and distressed by man-child than woman-child arguments and by interadult versus child-adult disputes? *Social Development*, 12, 162–181.
- Harwood, C., Drew, A., & Knight, C. J. (2010). Parental stressors in professional youth football academies: a qualitative investigation of specialising stage parents. *Qualitative Research in Sport and Exercise*, 2(1), 39–55. doi:10.1080/19398440903510152
- Harwood, C., & Knight, C. J. (2009a). Stress in youth sport: A developmental investigation of tennis parents. *Psychology of Sport and Exercise*, 10(4), 447–456. doi:10.1016/j.psychsport.2009.01.005
- Harwood, C., & Knight, C. J. (2009b). Understanding parental stressors: an investigation of British tennis-parents. *Journal of Sports Sciences*, 27(4), 339–51. doi:10.1080/02640410802603871
- Hedstrom, R., & Gould, D. (2004). Research in youth sports: Critical issues status. Retrieved from <http://www.educ.msu.edu/ysi/project/CriticalIssuesYouthSport.pdf>
- Hellstedt, J. C. (1987). The coach/parent/athlete relationship. *The Sport Psychologist*, 1, 151–160.

- Hennessy, D. A., & Schwartz, S. (2007). Personal predictors of spectator aggression at Little League baseball games. *Violence and Victims, 22*(2), 205–215.
- Henriksen, K. (2010). *The ecology of talent development in sport*. University of Southern Denmark.
- Holt, N. L., & Knight, C. J. (2014). *Parenting in youth sport: From research to practice*. New York, NY: Routledge.
- Holt, N. L., Tamminen, K. A., Black, D. E., Mandigo, J. L., & Fox, K. R. (2009). Youth sport parenting styles and practices. *Journal of Sport & Exercise Psychology, 31*(1), 37–59.
- Holt, N. L., Tamminen, K. A., Black, D. E., Sehn, Z. L., & Wall, M. P. (2008). Parental involvement in competitive youth sport settings. *Psychology of Sport and Exercise, 9*(5), 663–685. doi:10.1016/j.psychsport.2007.08.001
- Horn, T. S., & Horn, J. L. (2007). Family influences on children's sport and physical activity participation, behavior, and psychosocial responses. In G. Tenenbaum & R. Eklund (Eds.), *Handbook of sport psychology* (3rd ed., pp. 685–711). Hoboken, NJ: John Wiley & Sons, Inc.
- Jamieson, L. M., & Orr, T. J. (2009). *Sport and violence: A critical examination of sport violence in the world*. Burlington, MA: Elsevier Inc. doi:10.1016/B978-0-7506-8405-7.10006-0
- Jeffery-Tosoni, S., Fraser-Thomas, J., & Baker, J. (2015). Parent involvement in Canadian youth hockey: Experiences and perspectives of Peewee players. *Journal of Sport Behavior, 38*(1), 3–25.
- Keegan, R., Spray, C., Harwood, C., & Lavalley, D. (2010). The motivational atmosphere in youth sport: Coach, parent, and peer influences on motivation in specializing sport participants. *Journal of Applied Sport Psychology, 22*(1), 87–105. doi:10.1080/10413200903421267
- Kidman, L., McKenzie, A., & McKenzie, B. (1999). The nature and target of parents' comments during youth sport competitions. *Journal of Sport Behavior, 22*(1), 54–68.
- Kimiecik, J. C., & Horn, T. S. (2012). Examining the relationship between family context and children's physical activity beliefs: The role of parenting style. *Psychology of Sport and Exercise, 13*(1), 10–18. doi:10.1016/j.psychsport.2011.08.004
- Knight, C. J., Boden, C. M., & Holt, N. L. (2010). Junior tennis players' preferences for parental behaviors. *Journal of Applied Sport Psychology, 22*(4), 377–391. doi:10.1080/10413200.2010.495324
- Knight, C. J., & Holt, N. L. (2013). Factors that influence parents' experiences at junior tennis tournaments and suggestions for improvement. *Sport, Exercise, and Performance Psychology, 2*(3), 173–189. doi:10.1037/a0031203

- Knight, C. J., Neely, K. C., & Holt, N. L. (2011). Parental Behaviors in Team Sports: How do Female Athletes Want Parents to Behave? *Journal of Applied Sport Psychology, 23*(1), 76–92. doi:10.1080/10413200.2010.525589
- LaVoi, N. M. (2015). Head coaches of women's collegiate teams: A report of select NCAA Division-I mid-major institutions.
- LaVoi, N. M. (2016). A framework to understand experiences of women coaches around the globe. In N. M. LaVoi (Ed.), *Women in Sports Coaching* (pp. 13–34). London: Routledge.
- LaVoi, N. M., & Dutove, J. K. (2012). Barriers and supports for female coaches: An ecological model. *Sports Coaching Review, 1*(1), 17–37. doi:10.1080/21640629.2012.695891
- LaVoi, N. M., & Miles, A. (2008). *Eagan Athletic Association youth sport report*.
- LaVoi, N. M., & Stellino, M. B. (2008). The relation between perceived parent-created sport climate and competitive male youth hockey players' good and poor sport behaviors. *The Journal of Psychology, 142*(5), 471–95. doi:10.3200/JRLP.142.5.471-496
- Meân, L. J., & Kassing, J. W. (2007). Identities at Youth Sporting Events: A Critical Discourse Analysis. *International Journal of Sport Communication, 1*, 42–66.
- Michener, J. A. (1976). *Sports in America*. New York, NY: Random House.
- Nunomura, M., & Oliveira, M. S. (2013). Parents' support in the sports career of young gymnasts. *Science of Gymnastics Journal, 5*(1), 5–17.
- O'Rourke, D. J., Smith, R. E., Smoll, F. L., & Cumming, S. P. (2011). Trait anxiety in young athletes as a function of parental pressure and motivational climate: Is parental pressure always harmful? *Journal of Applied Sport Psychology, 23*(4), 398–412. doi:10.1080/10413200.2011.552089
- Omlí, J., & LaVoi, N. M. (2009). Background anger in youth sport: A perfect storm? *Journal of Sport Behavior, 32*(2), 242–260.
- Omlí, J., & LaVoi, N. M. (2012). Emotional Experiences of Youth Sport Parents I: Anger. *Journal of Applied Sport Psychology, 24*(1), 10–25. doi:10.1080/10413200.2011.578102
- Omlí, J., LaVoi, N. M., & Wiese-Bjornstal, D. M. (2008). Towards an understanding of parent spectator behavior at youth sport events. *Journal of Youth Sports, 3*(2), 30–33.
- Omlí, J., & Wiese-Bjornstal, D. M. (2011). Kids speak: preferred parental behavior at youth sport events. *Research Quarterly for Exercise and Sport, 82*(4), 702–11.
- Ornelas, I. J., Perreira, K. M., & Ayala, G. X. (2007). Parental influences on adolescent physical activity: A longitudinal study. *International Journal of Behavioral*

*Nutrition and Physical Activity*, 4(3).

- Pallant, J. (2013). *SPSS survival manual* (5th ed.). New York, NY: McGraw-Hill.
- Petersen, T. S. (2010). What makes a good sports parent? *Nordic Journal of Applied Ethics*, 4(1), 23–37.
- Quested, E., & Duda, J. L. (2011). Enhancing children's positive sport experiences and personal development. In I. Stafford (Ed.), *Coaching children in sport* (pp. 123–138). New York, NY: Routledge.
- Randall, L. E., & McKenzie, T. L. (1987). Spectator verbal behavior in organized youth soccer: A descriptive analysis. *Journal of Sport Behavior*, 10(4), 200–211.
- Sallis, J. F., Owen, N., & Fisher, E. B. (2008). Ecological models of health behavior. In K. Glanz, B. K. Rimer, & K. Viswanath (Eds.), *Health Behavior and Health Education: Theory, Research, and Practice* (4th ed., pp. 465–486). San Francisco, CA: Jossey-Bass.
- Salmon, J., Spence, J. C., Timperio, A., & Cutumisu, N. (2008). Living environments. In A. L. Smith & S. J. H. Biddle (Eds.), *Youth physical activity and sedentary behavior: Challenges and solutions* (pp. 403–428). Champaign, IL: Human Kinetics.
- Sánchez-Miguel, P. A., Leo, F. M., Sánchez-Oliva, D., Amado, D., & García-Calvo, T. (2013). The importance of parents' behavior in their children's enjoyment and amotivation in sports. *Journal of Human Kinetics*, 36, 169–177. doi:10.2478/hukin-2013-0017
- Schutt, R. K. (2005). *Investigating the social world: The process and practice of research* (5th ed.). Thousand Oaks, CA: Sage Publications.
- Seefeldt, V. D., Ewing, M. E., & Walk, M. (1992). Carnegie Council on Adolescent Development. In *Overview of youth sports programs in the United States*. Washington, DC.
- Shields, D. L., Bredemeier, B. L., LaVoi, N. M., & Power, F. C. (2005). The behavior of youth, parents, and coaches: The good, the bad & the ugly. *Journal of Research on Character Education*, 3(1), 43–59.
- Shields, D. L., LaVoi, N. M., Bredemeier, B. L., & Power, F. C. (2007). Predictors of poor sportspersonship in youth sports: Personal attitudes and social influences. *Journal of Sport & Exercise Psychology*, 29, 747–762.
- Spence, J. C., & Lee, R. E. (2003). Toward a comprehensive model of physical activity. *Psychology of Sport and Exercise*, 4(1), 7–24. doi:10.1016/S1469-0292(02)00014-6
- Statistics Canada. (2015). Population by sex and age group, by province and territory. Retrieved from <http://www.statcan.gc.ca/tables-tableaux/sum-som/101/cst01/demo31a-eng.htm>



- Stein, G. L., Raedeke, T. D., & Glenn, S. D. (1999). Children's perceptions of parent sport involvement: It's not how much, but to what degree that's important. *Journal of Sport Behavior*, 22(4), 591–601.
- Sue, V. M., & Ritter, L. A. (2007). *Conducting online research*. Thousand Oaks, CA: Sage Publications.
- Telama, R., Yang, X., Hirvensalo, M., & Raitakari, O. (2006). Participation in Organized Youth Sport as a Predictor of Adult Physical Activity : A 21-Year Longitudinal Study. *Pediatric Exercise Science*, 17, 76–88.
- Thul, C. M., & LaVoi, N. M. (2011). Reducing physical inactivity and promoting active living: From the voices of East African adolescent girls. *Qualitative Journal of Sport & Exercise*, 3(2), 211–237.
- Uhrich, S., & Koenigstorfer, J. (2009). Effects of atmosphere at major sports events: A perspective from environmental psychology. *International Journal of Sports Marketing & Sponsorship*, 10(4), 325–344.
- Vealey, R. S. (2005). *Coaching for the inner edge*. Morgantown, WV: Fitness Information Technology.
- Vincent, A. P., & Christensen, D. A. (2015). Conversations with parents: A collaborative sport psychology program for parents in youth sport. *Journal of Sport Psychology in Action*, 6, 73–85. doi:10.1080/21520704.2015.1054535
- Walley, P. B., Graham, G. M., & Forehand, R. (1982). Assessment and Treatment of Adult Observer Verbalizations at Youth League Baseball Games. *Journal of Sport Psychology*, 4, 254–266.
- Walters, S. R., Payne, D., Schluter, P. J., & Thomson, R. W. (2015). “It just makes you feel invincible”: A Foucauldian analysis of children's experiences of organised team sports. *Sport, Education and Society*, 20(2), 241–257. doi:10.1080/13573322.2012.745844
- Wann, D. L. (1993). Aggression Among Highly Identified Spectators as a Function of Their Need To Maintain Positive Social Identity. *Journal of Sport & Social Issues*, 17(2), 134–143. doi:10.1177/019372359301700207
- Wann, D. L., Carlson, J. D., & Schrader, M. P. (1999). The impact of team identification on the hostile and instrumental verbal aggression of sport spectators. *Journal of Social Behavior and Personality*, 14(2), 279–286.
- Wann, D. L., Culver, Z., Akanda, R., Daglar, M., De Divitiis, C., & Smith, A. (2005). The effects of team identification and game outcome on willingness to consider anonymous acts of hostile aggression. *Journal of Sport Behavior*, 28(3), 282–294.
- Wann, D. L., Dolan, T. J., McGeorge, K. K., & Allison, J. A. (1994). Relationships between spectator identification and spectators' perceptions of influence, spectators' emotions, and Competition outcome. *Journal of Sport & Exercise Psychology*, 16,

347–365.

- Wann, D. L., Grieve, F. G., Zapalac, R. K., & Pease, D. G. (2008). Motivational profiles of sport fans of different sports. *Sport Marketing Quarterly*, *17*, 6–19.
- Wann, D. L., Haynes, G., McLean, B., & Pullen, P. (2003). Sport team identification and willingness to consider anonymous acts of hostile aggression. *Aggressive Behavior*, *29*(5), 406–413. doi:10.1002/ab.10046
- Wann, D. L., Schrader, M. P., & Wilson, A. M. (1999). Sport fan motivation: Questionnaire validation, comparisons by sport, and relationship to athletic motivation. *Journal of Sport Behavior*, *22*(1), 114–139.
- Warburton, D. E. R., Nicol, C. W., & Bredin, S. S. D. (2006). Health benefits of physical activity: The evidence. *Canadian Medical Association Journal*, *174*(6), 801–9. doi:10.1503/cmaj.051351
- Ward Jr., R. E. (2002). Fan violence: Social problem or moral panic? *Aggression and Violent Behavior*, *7*, 453–475.
- Weinberg, R. S., & Gould, D. (2011). *Foundations of sport and exercise psychology* (5th ed.). Champaign, IL: Human Kinetics.
- Weiss, M. R., & Wiese-Bjornstal, D. M. (2009). Promoting positive youth development through physical activity. *President's Council on Physical Fitness and Sports: Research Digest*, *10*(3), 1–8.
- Wells, C. V. (2004). Facing off: Causal attributions and affective reactions of parent fans to objective outcomes and perceived performance. *North American Journal of Psychology*, *6*(2), 253–264.
- Wiersma, L. D., & Fifer, A. M. (2008). “The schedule has been tough but we think it’s worth it”: The joys, challenges, and recommendations of youth sport parents. *Journal of Leisure Research*, *40*(4), 505–530.
- Wiersma, L. D., & Sherman, C. P. (2005). Volunteer youth sport coaches’ perspectives of coaching education-certification and parental codes of conduct. *Research Quarterly for Exercise and Sport*, *76*(3), 324–338.
- Wiese-Bjornstal, D. M. (2004). From skinned knees and peewees to menisci and masters: Developmental sport injury psychology. In M. R. Weiss (Ed.), *Developmental sport and exercise psychology: A lifespan perspective* (pp. 525–568). Morgantown, WV: Fitness Information Technology.
- Wiese-Bjornstal, D. M. (2007). Psychological dimensions of girls’ physical activity participation. In M. J. Kane & N. M. LaVoi (Eds.), *Developing physically active girls: An evidence-based multidisciplinary approach* (pp. 7–27). Minneapolis, MN: The Tucker Center for Research on Girls & Women in Sport, University of Minnesota.
- Winges, J. B. (2012). *Athlete perceptions and consequences of parental background*

*anger in youth ice hockey*. University of Minnesota.

Wolff, R. (2012). Obnoxious sports parents: An alarming wave of sports parenting violence. *Ask Coach Wolf*.

*Women in High School Sport: Unpublished Executive Summary*. (2012).

Wuerth, S., Lee, M. ., & Alfermann, D. (2004). Parental involvement and athletes' career in youth sport. *Psychology of Sport and Exercise*, 5(1), 21–33. doi:10.1016/S1469-0292(02)00047-X

Wyshynski, G. (2015). Crazy hockey dad shatters glass while screaming at players.

## Appendix A: Institutional Review Board Approval

### ▶ Document Information

<b>Study Number:</b> 1505E70481	<b>Study Submission:</b> New Application
<b>Study Title(s):</b>	Sport Parent Sideline Behavior in Youth Baseball and Ice Hockey
<b>Principal Investigator:</b>	<a href="mailto:Dutove, Julia K dutov001@umn.edu">Dutove, Julia K dutov001@umn.edu</a>
<b>Expiration Date:</b>	
<b>Action History:</b>	<b>Date:</b>
Study exempt from IRB review category 2	06/03/2015
PI Response Required within 45 days	06/03/2015
Received	05/06/2015

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## Appendix B: Participant Recruitment Emails

### 1. Baseball Participants:

Dear Parents,

I am a doctoral student in the School of Kinesiology at the University of Minnesota. I am emailing to invite you to participate in a research study about parent sideline behavior during youth sport events. I am interested in parent perceptions about their own—and other parents'—behavior during games in general and in specific game situations. This research will be used to help us better understand sport parent sideline behavior and develop sport parent educational programming, with the ultimate goal of making youth sport sidelines positive for all youth. You were selected as a possible participant because you have a child who plays baseball. We ask that you read this form and email or call us with questions you may have before agreeing to be in the study.

#### **Procedures:**

If you agree to be in this study, we ask that you do the following things:

Fill out the survey using the link provided here about your experiences and preferences for sideline behavior in baseball. This survey will take about 20 minutes to complete. We are looking for the opinions of both mothers and fathers, so if there are two parents in your household, we encourage you both to take the survey independently. Anyone completing the survey is eligible to win one of ten \$25 gift certificates for Starbucks. Once you complete the survey you will be directed to a separate page to enter your name and email to be entered in this random drawing. If you do not wish to provide your name and/or email, you are not required to enter the random drawing.

**LINK TO SURVEY:** [https://umn.qualtrics.com/SE/?SID=SV\\_4TNN1twSBqT9ckB](https://umn.qualtrics.com/SE/?SID=SV_4TNN1twSBqT9ckB)

#### **Confidentiality:**

The records of this study will be kept private and confidential. In any report we might publish, we will not include any information that will make it possible to identify you personally. Research records will be stored securely and only researchers will have access to the records. You will not be asked for your name or any other identifying information in this study, with the exception of entering the random drawing. Your name will not be associated with your survey responses and will only be used to contact the winners.

#### **Voluntary Nature of the Study:**

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Baseball Alberta and the University of Minnesota. If you decide to participate, you are free not to answer any question or withdraw at any time without affecting those relationships.

**Contacts and Questions:**

The researchers conducting this study are Julia Dutove and Dr. Nicole LaVoi in the School of Kinesiology at the University of Minnesota. You may ask any questions you have by contacting Julia at 780-554-4068 or dutov001@umn.edu. Dr. LaVoi can be reached at 612-626-6055 or nmlavoi@umn.edu

If you have any questions or concerns regarding this study and would like to talk to someone other than the researchers, you are encouraged to contact the Research Subjects' Advocate Line, D528 Mayo, 420 Delaware St. Southwest, Minneapolis, Minnesota 55455; (612) 625-1650.

Thank you for your assistance,  
Julia Dutove

## 2. Ice Hockey Participants:

Dear Youth Sport Parent(s),

I am a doctoral student in the School of Kinesiology at the University of Minnesota. I am emailing to invite you to participate in a research study about parent sideline behavior during youth sport events. I am interested in parent perceptions about their own—and other parents'—behavior during games in general and in specific game situations. This research will be used to help us better understand sport parent sideline behavior and develop sport parent educational programming, with the ultimate goal of making youth sport sidelines positive for all youth. You were selected as a possible participant because you have a child who plays hockey. We ask that you read this form and email or call us with questions you may have before agreeing to be in the study.

### **Procedures:**

If you agree to be in this study, we ask that you do the following things:

Fill out the survey using the link provided here about your experiences and preferences for sideline behavior in hockey. This survey will take about 12-15 minutes to complete. We are looking for the opinions of both mothers and fathers, so if there are two parents in your household, we encourage you both to take the survey independently. Anyone completing the survey is eligible to win one of ten \$25 gift certificates for Starbucks. Once you complete the survey you will be directed to a separate page to enter your name and email to be entered in this random drawing. If you do not wish to provide your name and/or email, you are not required to enter the random drawing.

### **Confidentiality:**

The records of this study will be kept private and confidential. In any report we might publish, we will not include any information that will make it possible to identify you personally. Research records will be stored securely and only researchers will have access to the records. You will not be asked for your name or any other identifying information in this study, with the exception of entering the random drawing. Your name will not be associated with your survey responses and will only be used to contact the winners.

### **Voluntary Nature of the Study:**

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Hockey Alberta and the University of Minnesota. If you decide to participate, you are free not to answer any question or withdraw at any time without affecting those relationships.

### **Contacts and Questions:**

The researchers conducting this study are Julia Dutove and Dr. Nicole LaVoi in the School of Kinesiology at the University of Minnesota. You may ask any questions you

have by contacting Julia at 507-304-5739 or dutov001@umn.edu. Dr. LaVoi can be reached at 612-626-6055 or nmlavoi@umn.edu

If you have any questions or concerns regarding this study and would like to talk to someone other than the researchers, you are encouraged to contact the Research Subjects' Advocate Line, D528 Mayo, 420 Delaware St. Southwest, Minneapolis, Minnesota 55455; (612) 625-1650.

Thank you for your assistance,  
Julia Dutove



## Appendix C: Baseball Parent Sideline Behavior Survey

### BASEBALL PARENT SIDELINE BEHAVIOR SURVEY

Please answer all questions honestly. All responses will be kept confidential and you will not be asked for your name or any other identifying information during the survey. Participation in this study is voluntary and you are not required to answer any questions. By clicking yes in this question, you are consenting to participate in this study. This study will take approximately 20 to 30 minutes to complete. If you have any questions about participating in this study, please contact Julia Dutove at [dutov001@umn.edu](mailto:dutov001@umn.edu)

- Yes, I agree to participate in this study
- No, I do not agree to participate in this study

[Participants who answer “No” are re-directed to end of survey thanking them for their time]

#### PART I: DEMOGRAPHICS

Your gender:

- Male
- Female

Your current province/territory of residence:

[Dropdown menu of provinces/territories in Canada]

Your current age:

Your racial/ethnic identification:

- White
- South Asian (e.g., East Indian, Pakistani, Sri Lankan, etc.)
- Chinese
- Black
- Filipino
- Latin American
- Arab
- Southeast Asian (e.g., Vietnamese, Cambodian, Laotian, Thai, etc.)
- West Asian (e.g., Iranian, Afghan, etc.)
- Korean
- Japanese
- Aboriginal (First Nations (North American Indian, Metis, Inuk (Inuit))
- Other (specify) \_\_\_\_\_

Your current relationship status:

- Single
- Married
- Civil union
- Committed relationship
- Other (specify) \_\_\_\_\_

Highest level of education you have completed:

- Some high school
- High school/GED
- Some college/trade school
- Associate's degree
- Bachelor's degree (B.A., B.S.)
- Some graduate credit
- Graduate degree (Masters, PhD, J.D., J.M.)
- Other (specify) \_\_\_\_\_

How many years have you been a sport parent?

[Dropdown menu]

Gender and age of child (or children) that play baseball:

	Gender of child		Age group
	Male	Female	
Child 1	<input type="radio"/>	<input type="radio"/>	_____
Child 2	<input type="radio"/>	<input type="radio"/>	_____
Child 3	<input type="radio"/>	<input type="radio"/>	_____
Child 4	<input type="radio"/>	<input type="radio"/>	_____

[Age groups:

Rookie/Rally Cap (9U)

Mosquito (11U)

Peewee (13U)

Bantam (15U)

Midget (18U)]

Indicate the highest level you competed in baseball:

- I have never played baseball
- Community ('A')/House League
- Minor – Competitive ('AA')
- Minor – Performance ('AAA')
- Senior
- College/Professional

Indicate the highest level you coached baseball:

- I have never coached baseball

- Community ('A')/House League
- Minor – Competitive ('AA')
- Minor – Performance ('AAA')
- Senior
- College/Professional

How many years total have you coached baseball at any level?  
(If you have never coached baseball, choose 0)  
[Dropdown menu]

For the next set of questions, please answer using only your own personal knowledge. Use of other people's knowledge or looking up answers from other sources will affect the data and hinder our efforts in accurately assessing the youth sport climate.

The visiting team hits and the home team plays defense in the top of the inning.

- True
- False
- I don't know

If a player has 2 strikes and hits a foul ball, what happens?

- He or she gets another strike and is out
- He or she gets another ball
- Neither a ball nor strike is called
- I don't know

Fair territory is:

- Between the foul lines both in and outfield
- Anywhere where there is grass
- Between the foul lines in the outfield
- I don't know

Players must follow the batting order and substitutions are not allowed once the game starts.

- True
- False
- I don't know

Which of the following is NOT a way that a player can be out?

- Striking out
- Touching the base after the ball is caught by an outfielder and then running to the next base
- Being touched by the ball or by a glove with the ball in it
- I don't know

## PART II: GENERAL BASEBALL PARENT SIDELINE BEHAVIOR

For each of the following 5 questions, select the response that most closely fits how you see parent behavior generally on youth baseball sidelines. Note that some questions are specific to mothers or fathers.

1. In general on youth baseball sidelines, how often do **mothers**:

Yell at athletes on the field (i.e., taunt, personally single an athlete out, harshly criticize, slam, name call, trash talk)	Never	Almost never	Sometimes	Almost all the time	All of the time
Act in a way that is embarrassing	Never	Almost never	Sometimes	Almost all the time	All of the time
Act like a 'bad sport'	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell at the umpire (i.e., taunt, personally single out, harshly criticize, slam, name call)	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell at the coach(es) (i.e., taunt, personally single out, harshly criticize, slam, name call)	Never	Almost never	Sometimes	Almost all the time	All of the time
Verbally 'get into it,' as in arguing or yelling with someone (another fan, parent, coach)	Never	Almost never	Sometimes	Almost all the time	All of the time
Physically 'get into it,' as in fighting, punching, choking or slapping someone (another fan, parent, coach)	Never	Almost never	Sometimes	Almost all the time	All of the time
'Coach' from the sidelines (i.e., yell instructions to team and/or child)	Never	Almost never	Sometimes	Almost all the time	All of the time
Encourage the athletes to 'play rough' (i.e., slide into the base hard to take out another player, tag harder than necessary)	Never	Almost never	Sometimes	Almost all the time	All of the time
Encourage the athletes to play outside the rules	Never	Almost	Sometimes	Almost all	All of the

(i.e., pitching when the hitter is not ready)		never		the time	time
Cheer for good play for both teams	Never	Almost never	Sometimes	Almost all the time	All of the time
Cheer for athlete effort	Never	Almost never	Sometimes	Almost all the time	All of the time
Use profanity loud enough for athletes to hear	Never	Almost never	Sometimes	Almost all the time	All of the time
Show up to a practice or game intoxicated	Never	Almost never	Sometimes	Almost all the time	All of the time
Distract athletes from focusing on the game	Never	Almost never	Sometimes	Almost all the time	All of the time
Sit silently-and clap only when an athlete (or the team) does something good	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell something offensive to, or about, someone (e.g., athlete, parent, coach, umpire)	Never	Almost never	Sometimes	Almost all the time	All of the time

2. In general on youth baseball sidelines, how often do **fathers**:

Yell at athletes on the field (i.e., taunt, personally single an athlete out, harshly criticize, slam, name call, trash talk)	Never	Almost never	Sometimes	Almost all the time	All of the time
Act in a way that is embarrassing	Never	Almost never	Sometimes	Almost all the time	All of the time
Act like a 'bad sport'	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell at the umpire (i.e., taunt, personally single out, harshly criticize, slam, name call)	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell at the coach(es) (i.e., taunt, personally	Never	Almost	Sometimes	Almost all	All of the

single out, harshly criticize, slam, name call)		never		the time	time
Verbally 'get into it,' as in arguing or yelling with someone (another fan, parent, coach)	Never	Almost never	Sometimes	Almost all the time	All of the time
Physically 'get into it,' as in fighting, punching, choking or slapping someone (another fan, parent, coach)	Never	Almost never	Sometimes	Almost all the time	All of the time
'Coach' from the sidelines (i.e., yell instructions to team and/or child)	Never	Almost never	Sometimes	Almost all the time	All of the time
Encourage the athletes to 'play rough' (i.e., slide into the base hard to take out another player, tag harder than necessary)	Never	Almost never	Sometimes	Almost all the time	All of the time
Encourage the athletes to play outside the rules (i.e., pitching when the hitter is not ready)	Never	Almost never	Sometimes	Almost all the time	All of the time
Cheer for good play for both teams	Never	Almost never	Sometimes	Almost all the time	All of the time
Cheer for athlete effort	Never	Almost never	Sometimes	Almost all the time	All of the time
Use profanity loud enough for athletes to hear	Never	Almost never	Sometimes	Almost all the time	All of the time
Show up to a practice or game intoxicated	Never	Almost never	Sometimes	Almost all the time	All of the time
Distract athletes from focusing on the game	Never	Almost never	Sometimes	Almost all the time	All of the time
Sit silently-and clap only when an athlete (or the team) does something good	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell something offensive to, or about, someone (e.g., athlete, parent, coach, umpire)	Never	Almost never	Sometimes	Almost all the time	All of the time

3. In general on youth baseball sidelines, how often do YOU:

Yell at athletes on the field (i.e., taunt, personally single an athlete out, harshly criticize, slam, name call, trash talk)	Never	Almost never	Sometimes	Almost all the time	All of the time
Act in a way that is embarrassing	Never	Almost never	Sometimes	Almost all the time	All of the time
Act like a 'bad sport'	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell at the umpire (i.e., taunt, personally single out, harshly criticize, slam, name call)	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell at the coach(es) (i.e., taunt, personally single out, harshly criticize, slam, name call)	Never	Almost never	Sometimes	Almost all the time	All of the time
Verbally 'get into it,' as in arguing or yelling with someone (another fan, parent, coach)	Never	Almost never	Sometimes	Almost all the time	All of the time
Physically 'get into it,' as in fighting, punching, choking or slapping someone (another fan, parent, coach)	Never	Almost never	Sometimes	Almost all the time	All of the time
'Coach' from the sidelines (i.e., yell instructions to team and/or child)	Never	Almost never	Sometimes	Almost all the time	All of the time
Encourage the athletes to 'play rough' (i.e., slide into the base hard to take out another player, tag harder than necessary)	Never	Almost never	Sometimes	Almost all the time	All of the time
Encourage the athletes to play outside the rules (i.e., pitching when the hitter is not ready)	Never	Almost never	Sometimes	Almost all the time	All of the time
Cheer for good play for both teams	Never	Almost	Sometimes	Almost all	All of the

		never		the time	time
Cheer for athlete effort	Never	Almost never	Sometimes	Almost all the time	All of the time
Use profanity loud enough for athletes to hear	Never	Almost never	Sometimes	Almost all the time	All of the time
Show up to a practice or game intoxicated	Never	Almost never	Sometimes	Almost all the time	All of the time
Distract athletes from focusing on the game	Never	Almost never	Sometimes	Almost all the time	All of the time
Sit silently-and clap only when an athlete (or the team) does something good	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell something offensive to, or about, someone (e.g., athlete, parent, coach, umpire)	Never	Almost never	Sometimes	Almost all the time	All of the time

4. In general on youth baseball sidelines, how **acceptable** is it for **mothers** to:

Yell at athletes on the field (i.e., taunt, personally single an athlete out, harshly criticize, slam, name call, trash talk)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Act in a way that is embarrassing	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Act like a 'bad sport'	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate



Yell at the umpire (i.e., taunt, personally single out, harshly criticize, slam, name call)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Yell at the coach(es) (i.e., taunt, personally single out, harshly criticize, slam, name call)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Verbally 'get into it,' as in arguing or yelling with someone (another fan, parent, coach)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Physically 'get into it,' as in fighting, punching, choking or slapping someone (another fan, parent, coach)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
'Coach' from the sidelines (i.e., yell instructions to team and/or child)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Encourage the athletes to 'play rough' (i.e., slide into the base hard to take out another player, tag harder than necessary)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Encourage the athletes to play outside the rules (i.e., pitching when the hitter is not ready)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Cheer for good play for both teams	1	2	3	4	5

	Never appropriate	Appropriate once in a while	Sometimes appropriate	Usually appropriate	Always appropriate
Cheer for athlete effort	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Use profanity loud enough for athletes to hear	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Show up to a practice or game intoxicated	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Distract athletes from focusing on the game	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Sit silently-and clap only when an athlete (or the team) does something good	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Yell something offensive to, or about, someone (e.g., athlete, parent, coach, umpire)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate

5. In general on youth baseball sidelines, how **acceptable** is it for **fathers** to:

Yell at athletes on the field (i.e., taunt, personally single an athlete out, harshly criticize, slam, name call, trash talk)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Act in a way that is embarrassing	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Act like a 'bad sport'	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Yell at the umpire (i.e., taunt, personally single out, harshly criticize, slam, name call)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Yell at the coach(es) (i.e., taunt, personally single out, harshly criticize, slam, name call)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Verbally 'get into it,' as in arguing or yelling with someone (another fan, parent, coach)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Physically 'get into it,' as in fighting, punching, choking or slapping someone (another fan, parent, coach)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate

'Coach' from the sidelines (i.e., yell instructions to team and/or child)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Encourage the athletes to 'play rough' (i.e., slide into the base hard to take out another player, tag harder than necessary)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Encourage the athletes to play outside the rules (i.e., pitching when the hitter is not ready)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Cheer for good play for both teams	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Cheer for athlete effort	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Use profanity loud enough for athletes to hear	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Show up to a practice or game intoxicated	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Distract athletes from focusing on the game	1	2	3	4	5

	Never appropriate	Appropriate once in a while	Sometimes appropriate	Usually appropriate	Always appropriate
Sit silently-and clap only when an athlete (or the team) does something good	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Yell something offensive to, or about, someone (e.g., athlete, parent, coach, umpire)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate

### PART III: BASEBALL PARENT SIDELINE BEHAVIOR IN SPECIFIC SITUATIONS

This is the last part of the survey. For each of the following 2 short hypothetical situations, please read the situation and answer the questions that follow. These are similar questions as you answered previously, but now will be related to a specific situation. Please answer honestly. There are no right or wrong answers for any of these questions and all answers will be kept completely anonymous.

[There are 8 situations in total, 2 on each topic (situations 1 and 2: referee incompetence, situations 3 and 4: athlete unsportsmanlike conduct, situations 5 and 6: coach incompetence, and situations 7 and 8: parent unsportsmanlike behavior). In this section, participants will be randomly given 2 situations on the same topic.]

**Situation 1.** You are watching your child's team play a game early in the season against a team that is not much of a rival. It is the first inning and the score is tied 0-0. The umpire calls a player safe that was clearly out resulting in the opposition scoring a run.

1. In this situation, how likely do you think **mothers** are to:

Yell at athletes on the field (i.e., taunt, personally single an athlete out, harshly criticize, slam, name call, trash talk)	Never	Almost never	Sometimes	Almost all the time	All of the time
Act in a way that is embarrassing	Never	Almost never	Sometimes	Almost all the time	All of the time
Act like a 'bad sport'	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell at the umpire (i.e., taunt, personally single out, harshly criticize, slam, name call)	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell at the coach(es) (i.e., taunt, personally single out, harshly criticize, slam, name call)	Never	Almost never	Sometimes	Almost all the time	All of the time
Verbally 'get into it,' as in arguing or yelling with someone (another fan, parent, coach)	Never	Almost never	Sometimes	Almost all the time	All of the time

Physically 'get into it,' as in fighting, punching, choking or slapping someone (another fan, parent, coach)	Never	Almost never	Sometimes	Almost all the time	All of the time
'Coach' from the sidelines (i.e., yell instructions to team and/or child)	Never	Almost never	Sometimes	Almost all the time	All of the time
Encourage the athletes to 'play rough' (i.e., slide into the base hard to take out another player, tag harder than necessary)	Never	Almost never	Sometimes	Almost all the time	All of the time
Encourage the athletes to play outside the rules (i.e., pitching when the hitter is not ready)	Never	Almost never	Sometimes	Almost all the time	All of the time
Cheer for good play for both teams	Never	Almost never	Sometimes	Almost all the time	All of the time
Cheer for athlete effort	Never	Almost never	Sometimes	Almost all the time	All of the time
Use profanity loud enough for athletes to hear	Never	Almost never	Sometimes	Almost all the time	All of the time
Distract athletes from focusing on the game	Never	Almost never	Sometimes	Almost all the time	All of the time
Sit silently-and clap only when an athlete (or the team) does something good	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell something offensive to, or about, someone (e.g., athlete, parent, coach, umpire)	Never	Almost never	Sometimes	Almost all the time	All of the time

2. In this situation, how likely do you think **fathers** are to:

Yell at athletes on the field (i.e., taunt, personally single an athlete out, harshly criticize, slam, name call, trash talk)	Never	Almost never	Sometimes	Almost all the time	All of the time
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Act in a way that is embarrassing	Never	Almost never	Sometimes	Almost all the time	All of the time
Act like a 'bad sport'	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell at the umpire (i.e., taunt, personally single out, harshly criticize, slam, name call)	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell at the coach(es) (i.e., taunt, personally single out, harshly criticize, slam, name call)	Never	Almost never	Sometimes	Almost all the time	All of the time
Verbally 'get into it,' as in arguing or yelling with someone (another fan, parent, coach)	Never	Almost never	Sometimes	Almost all the time	All of the time
Physically 'get into it,' as in fighting, punching, choking or slapping someone (another fan, parent, coach)	Never	Almost never	Sometimes	Almost all the time	All of the time
'Coach' from the sidelines (i.e., yell instructions to team and/or child)	Never	Almost never	Sometimes	Almost all the time	All of the time
Encourage the athletes to 'play rough' (i.e., slide into the base hard to take out another player, tag harder than necessary)	Never	Almost never	Sometimes	Almost all the time	All of the time
Encourage the athletes to play outside the rules (i.e., pitching when the hitter is not ready)	Never	Almost never	Sometimes	Almost all the time	All of the time
Cheer for good play for both teams	Never	Almost never	Sometimes	Almost all the time	All of the time
Cheer for athlete effort	Never	Almost never	Sometimes	Almost all the time	All of the time
Use profanity loud enough for athletes to hear	Never	Almost never	Sometimes	Almost all the time	All of the time
Distract athletes from focusing on the game	Never	Almost never	Sometimes	Almost all the time	All of the time
Sit silently-and clap only when an athlete (or the	Never	Almost	Sometimes	Almost all	All of the



team) does something good		never		the time	time
Yell something offensive to, or about, someone (e.g., athlete, parent, coach, umpire)	Never	Almost never	Sometimes	Almost all the time	All of the time

3. In this situation, how likely are **YOU** to:

Yell at athletes on the field (i.e., taunt, personally single an athlete out, harshly criticize, slam, name call, trash talk)	Never	Almost never	Sometimes	Almost all the time	All of the time
Act in a way that is embarrassing	Never	Almost never	Sometimes	Almost all the time	All of the time
Act like a 'bad sport'	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell at the umpire (i.e., taunt, personally single out, harshly criticize, slam, name call)	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell at the coach(es) (i.e., taunt, personally single out, harshly criticize, slam, name call)	Never	Almost never	Sometimes	Almost all the time	All of the time
Verbally 'get into it,' as in arguing or yelling with someone (another fan, parent, coach)	Never	Almost never	Sometimes	Almost all the time	All of the time
Physically 'get into it,' as in fighting, punching, choking or slapping someone (another fan, parent, coach)	Never	Almost never	Sometimes	Almost all the time	All of the time
'Coach' from the sidelines (i.e., yell instructions to team and/or child)	Never	Almost never	Sometimes	Almost all the time	All of the time
Encourage the athletes to 'play rough' (i.e., slide into the base hard to take out another player, tag harder than necessary)	Never	Almost never	Sometimes	Almost all the time	All of the time
Encourage the athletes to play outside the rules	Never	Almost	Sometimes	Almost all	All of the

(i.e., pitching when the hitter is not ready)		never		the time	time
Cheer for good play for both teams	Never	Almost never	Sometimes	Almost all the time	All of the time
Cheer for athlete effort	Never	Almost never	Sometimes	Almost all the time	All of the time
Use profanity loud enough for athletes to hear	Never	Almost never	Sometimes	Almost all the time	All of the time
Distract athletes from focusing on the game	Never	Almost never	Sometimes	Almost all the time	All of the time
Sit silently-and clap only when an athlete (or the team) does something good	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell something offensive to, or about, someone (e.g., athlete, parent, coach, umpire)	Never	Almost never	Sometimes	Almost all the time	All of the time

4. In this situation, how **acceptable** is it for **mothers** to:

Yell at athletes on the field (i.e., taunt, personally single an athlete out, harshly criticize, slam, name call, trash talk)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Act in a way that is embarrassing	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Act like a 'bad sport'	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate

Yell at the umpire (i.e., taunt, personally single out, harshly criticize, slam, name call)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Yell at the coach(es) (i.e., taunt, personally single out, harshly criticize, slam, name call)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Verbally 'get into it,' as in arguing or yelling with someone (another fan, parent, coach)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Physically 'get into it,' as in fighting, punching, choking or slapping someone (another fan, parent, coach)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
'Coach' from the sidelines (i.e., yell instructions to team and/or child)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Encourage the athletes to 'play rough' (i.e., slide into the base hard to take out another player, tag harder than necessary)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Encourage the athletes to play outside the rules (i.e., pitching when the hitter is not ready)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Cheer for good play for both teams	1	2	3	4	5

	Never appropriate	Appropriate once in a while	Sometimes appropriate	Usually appropriate	Always appropriate
Cheer for athlete effort	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Use profanity loud enough for athletes to hear	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Distract athletes from focusing on the game	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Sit silently-and clap only when an athlete (or the team) does something good	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Yell something offensive to, or about, someone (e.g., athlete, parent, coach, umpire)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate

5. In this situation, how **acceptable** is it for **fathers** to:

Yell at athletes on the field (i.e., taunt,	1	2	3	4	5
---	---	---	---	---	---

personally single an athlete out, harshly criticize, slam, name call, trash talk)	Never appropriate	Appropriate once in a while	Sometimes appropriate	Usually appropriate	Always appropriate
Act in a way that is embarrassing	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Act like a 'bad sport'	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Yell at the umpire (i.e., taunt, personally single out, harshly criticize, slam, name call)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Yell at the coach(es) (i.e., taunt, personally single out, harshly criticize, slam, name call)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Verbally 'get into it,' as in arguing or yelling with someone (another fan, parent, coach)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Physically 'get into it,' as in fighting, punching, choking or slapping someone (another fan, parent, coach)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
'Coach' from the sidelines (i.e., yell instructions to team and/or child)	1 Never	2 Appropriate	3 Sometimes	4 Usually	5 Always

	appropriate	once in a while	appropriate	appropriate	appropriate
Encourage the athletes to 'play rough' (i.e., slide into the base hard to take out another player, tag harder than necessary)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Encourage the athletes to play outside the rules (i.e., pitching when the hitter is not ready)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Cheer for good play for both teams	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Cheer for athlete effort	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Use profanity loud enough for athletes to hear	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Distract athletes from focusing on the game	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Sit silently-and clap only when an athlete (or the team) does something good	1 Never appropriate	2 Appropriate once in a	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate

		while			
Yell something offensive to, or about, someone (e.g., athlete, parent, coach, umpire)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate

[NOTE: After each of the following situations, the same 5 questions are asked as in the previous situations (i.e., (1) In this situation, how likely do you think **mothers** are to... (2) In this situation, how likely do you think **fathers** are to... etc). For ease of reading here, I have not included the questions, just the situations. The full version can be provided if needed.]

**Situation 2.** You are watching your child's team play the last game of the season against their biggest rival. The winner of this game will get a playoff spot and the losing team will be done for the season. It is the bottom of the last inning and the opposition is at bat. The score is tied. The umpire calls a player safe that was clearly out resulting in the opposition scoring a run.

**Situation 3.** You are watching your child's team play a game early in the season against a team that is not much of a rival. It is the first inning and the score is tied 0-0. A player from the opposing team strikes out and reacts by throwing the bat.

**Situation 4.** You are watching your child's team play the last game of the season against their biggest rival. The winner of this game will get a playoff spot and the losing team will be done for the season. It is the bottom of the last inning and the opposition is at bat. The score is tied. A player from the opposing team strikes out and reacts by throwing the bat.

**Situation 5.** You are watching your child's team play a game early in the season against a team that is not much of a rival. It is the first inning and the score is tied 0-0. The coach puts in a weaker player who has not yet played and takes out

a stronger player to ensure everyone gets a chance to play, even though that will likely result in the other team getting at least one run.

**Situation 6.** You are watching your child's team play the last game of the season against their biggest rival. The winner of this game will get a playoff spot and the losing team will be done for the season. It is the bottom of the last inning and the opposition is at bat. The score is tied. The coach puts in a weaker player who has not yet played and takes out a stronger player to ensure everyone gets a chance to play, even though that will likely result in the other team getting at least one run.

**Situation 7.** You are watching your child's team play a game early in the season against a team that is not much of a rival. It is the first inning and the score is tied 0-0. As a player from your child's team goes up to bat, a parent from the opposition starts yelling "easy out" at the player.

**Situation 8.** You are watching your child's team play the last game of the season against their biggest rival. The winner of this game will get a playoff spot and the losing team will be done for the season. It is the bottom of the last inning and the opposition is at bat. The score is tied. As a player from your child's team goes up to bat, a parent from the opposition starts yelling "easy out" at the player.

Do you have any other comments about parent sideline behavior in baseball related to this study?  
[open ended question for parents to leave comments]

Do you want to be entered in a random drawing to receive a \$25 gift card for Starbucks?

- Yes
- No

[If "yes"] Please answer the following questions so that you can be included in a random drawing for a Starbucks gift card. This information will not be associated with your survey responses.

First Name \_\_\_\_\_  
Last Name \_\_\_\_\_



Email \_\_\_\_\_

[If “no”, or once they have filled out contact information if “yes”] Thank you for taking the time to complete this survey. We appreciate your willingness to participate and provide us with valuable information about the current climate of youth baseball. If you have any questions about this survey, please contact Julia Dutove at [dutov001@umn.edu](mailto:dutov001@umn.edu)

## Appendix D: Ice Hockey Parent Sideline Behavior Survey

### HOCKEY PARENT SIDELINE BEHAVIOR SURVEY

Please answer all questions honestly. All responses will be kept confidential and you will not be asked for your name or any other identifying information during the survey. Participation in this study is voluntary and you are not required to answer any questions. By clicking yes in this question, you are consenting to participate in this study. This study will take approximately 20 to 30 minutes to complete. If you have any questions about participating in this study, please contact Julia Dutove at [dutov001@umn.edu](mailto:dutov001@umn.edu)

- Yes, I agree to participate in this study
- No, I do not agree to participate in this study

[Participants who answer “No” are re-directed to end of survey thanking them for their time]

#### PART I: DEMOGRAPHICS

Your gender:

- Male
- Female

Your current province/territory of residence:

[Dropdown menu of provinces/territories in Canada]

Your current age:

[Dropdown menu]

Your racial/ethnic identification:

- White
- South Asian (e.g., East Indian, Pakistani, Sri Lankan, etc.)
- Chinese
- Black
- Filipino
- Latin American
- Arab
- Southeast Asian (e.g., Vietnamese, Cambodian, Laotian, Thai, etc.)
- West Asian (e.g., Iranian, Afghan, etc.)
- Korean
- Japanese
- Aboriginal (First Nations (North American Indian, Metis, Inuk (Inuit))
- Other (specify) \_\_\_\_\_

Your current relationship status:

- Single
- Married
- Civil union
- Committed relationship
- Other (specify) \_\_\_\_\_

Highest level of education you have completed:

- Some high school
- High school/GED
- Some college/trade school
- Associate's degree
- Bachelor's degree (B.A., B.S.)
- Some graduate credit
- Graduate degree (Masters, PhD, J.D., J.M.)
- Other (specify) \_\_\_\_\_

How many years have you been a sport parent?

[Dropdown menu]

Gender and age of child (or children) that play hockey:

	Gender of child		Age group
	Male	Female	
Child 1	<input type="radio"/>	<input type="radio"/>	_____
Child 2	<input type="radio"/>	<input type="radio"/>	_____
Child 3	<input type="radio"/>	<input type="radio"/>	_____
Child 4	<input type="radio"/>	<input type="radio"/>	_____

[Age groups:

Initiation (6 & Under)

Novice (7-8)

Atom (9-10)

Peewee (11-12)

Bantam (13-14)

Midget (15-17)]

Indicate the highest level you competed in hockey:

- I have never played hockey
- Community 'A'/House League
- Minor – Competitive ('AA')
- Minor – Performance ('AAA')
- Senior
- College/Professional

Indicate the highest level you coached hockey:

- I have never played hockey
- Community 'A'/House League
- Minor – Competitive ('AA')
- Minor – Performance ('AAA')
- Senior
- College/Professional

How many years total have you coached hockey at any level?

(If you have never coached hockey, choose 0)

[Dropdown menu]

For the next set of questions, please answer using only your own personal knowledge. Use of other people's knowledge or looking up answers from other sources will affect the data and hinder our efforts in accurately assessing the youth sport climate.

After a team ices the puck, play is stopped and the puck is returned to the other end for a face-off in the offending team's zone.

- True
- False

Which of the following are only the referees allowed to do (not the linesman)?

- Watch for offsides
- Break up fights
- Assess all minor penalties
- I don't know

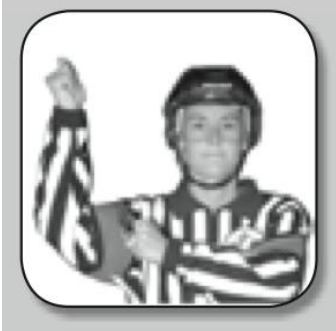
Where is the face-off after a goal is scored?

- At center ice
- In the scoring team's zone
- In the non-scoring team's zone
- I don't know

Which of the following is an offside?

- When an attacking team's player has one skate over the blue line before the puck has crossed the blue line
- When an attacking team's player has both skates over the blue line before the puck is over the blue line
- When the attacking team's player has his or her stick across the blue line but the puck has not yet crossed the blue line
- I don't know

What is the referee signaling in this picture?



- Charging
- Goal scored
- High sticking
- I don't know

## PART II: GENERAL HOCKEY PARENT SIDELINE BEHAVIOR

For each of the following 5 questions, select the response that most closely fits how you see parent behavior generally on youth hockey sidelines. Note that some questions are specific to mothers or fathers.

1. In general on youth hockey sidelines, how often do **mothers**:

Yell at athletes on the ice (i.e., taunt, personally single an athlete out, harshly criticize, slam, name call, trash talk)	Never	Almost never	Sometimes	Almost all the time	All of the time
Act in a way that is embarrassing	Never	Almost never	Sometimes	Almost all the time	All of the time
Act like a 'bad sport'	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell at the referee(s) (i.e., taunt, personally single out, harshly criticize, slam, name call)	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell at the coach(es) (i.e., taunt, personally single out, harshly criticize, slam, name call)	Never	Almost never	Sometimes	Almost all the time	All of the time
Verbally 'get into it,' as in arguing or yelling with someone (another fan, parent, coach)	Never	Almost never	Sometimes	Almost all the time	All of the time
Physically 'get into it,' as in fighting, punching, choking or slapping someone (another fan, parent, coach)	Never	Almost never	Sometimes	Almost all the time	All of the time
'Coach' from the sidelines (i.e., yell instructions to team and/or child)	Never	Almost never	Sometimes	Almost all the time	All of the time
Encourage the athletes to 'play rough' (i.e., push, elbow, take someone out, retaliate, cheap shots)	Never	Almost never	Sometimes	Almost all the time	All of the time
Encourage the athletes to play outside the rules	Never	Almost	Sometimes	Almost all	All of the

(i.e., faking injury, shirt pulling, taking a dive)		never		the time	time
Cheer for good play for both teams	Never	Almost never	Sometimes	Almost all the time	All of the time
Cheer for athlete effort	Never	Almost never	Sometimes	Almost all the time	All of the time
Use profanity loud enough for athletes to hear	Never	Almost never	Sometimes	Almost all the time	All of the time
Show up to a practice or game intoxicated	Never	Almost never	Sometimes	Almost all the time	All of the time
Distract athletes from focusing on the game	Never	Almost never	Sometimes	Almost all the time	All of the time
Sit silently-and clap only when an athlete (or the team) does something good	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell something offensive to, or about, someone (e.g., athlete, parent, coach, referee(s))	Never	Almost never	Sometimes	Almost all the time	All of the time

2. In general on youth hockey sidelines, how often do **fathers**:

Yell at athletes on the ice (i.e., taunt, personally single an athlete out, harshly criticize, slam, name call, trash talk)	Never	Almost never	Sometimes	Almost all the time	All of the time
Act in a way that is embarrassing	Never	Almost never	Sometimes	Almost all the time	All of the time
Act like a 'bad sport'	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell at the referee(s) (i.e., taunt, personally single out, harshly criticize, slam, name call)	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell at the coach(es) (i.e., taunt, personally	Never	Almost	Sometimes	Almost all	All of the

single out, harshly criticize, slam, name call)		never		the time	time
Verbally 'get into it,' as in arguing or yelling with someone (another fan, parent, coach)	Never	Almost never	Sometimes	Almost all the time	All of the time
Physically 'get into it,' as in fighting, punching, choking or slapping someone (another fan, parent, coach)	Never	Almost never	Sometimes	Almost all the time	All of the time
'Coach' from the sidelines (i.e., yell instructions to team and/or child)	Never	Almost never	Sometimes	Almost all the time	All of the time
Encourage the athletes to 'play rough' (i.e., push, elbow, take someone out, retaliate, cheap shots)	Never	Almost never	Sometimes	Almost all the time	All of the time
Encourage the athletes to play outside the rules (i.e., faking injury, shirt pulling, taking a dive)	Never	Almost never	Sometimes	Almost all the time	All of the time
Cheer for good play for both teams	Never	Almost never	Sometimes	Almost all the time	All of the time
Cheer for athlete effort	Never	Almost never	Sometimes	Almost all the time	All of the time
Use profanity loud enough for athletes to hear	Never	Almost never	Sometimes	Almost all the time	All of the time
Show up to a practice or game intoxicated	Never	Almost never	Sometimes	Almost all the time	All of the time
Distract athletes from focusing on the game	Never	Almost never	Sometimes	Almost all the time	All of the time
Sit silently-and clap only when an athlete (or the team) does something good	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell something offensive to, or about, someone (e.g., athlete, parent, coach, referee(s))	Never	Almost never	Sometimes	Almost all the time	All of the time



3. In general on youth hockey sidelines, how often do YOU:

Yell at athletes on the ice (i.e., taunt, personally single an athlete out, harshly criticize, slam, name call, trash talk)	Never	Almost never	Sometimes	Almost all the time	All of the time
Act in a way that is embarrassing	Never	Almost never	Sometimes	Almost all the time	All of the time
Act like a 'bad sport'	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell at the referee(s) (i.e., taunt, personally single out, harshly criticize, slam, name call)	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell at the coach(es) (i.e., taunt, personally single out, harshly criticize, slam, name call)	Never	Almost never	Sometimes	Almost all the time	All of the time
Verbally 'get into it,' as in arguing or yelling with someone (another fan, parent, coach)	Never	Almost never	Sometimes	Almost all the time	All of the time
Physically 'get into it,' as in fighting, punching, choking or slapping someone (another fan, parent, coach)	Never	Almost never	Sometimes	Almost all the time	All of the time
'Coach' from the sidelines (i.e., yell instructions to team and/or child)	Never	Almost never	Sometimes	Almost all the time	All of the time
Encourage the athletes to 'play rough' (i.e., push, elbow, take someone out, retaliate, cheap shots)	Never	Almost never	Sometimes	Almost all the time	All of the time
Encourage the athletes to play outside the rules (i.e., faking injury, shirt pulling, taking a dive)	Never	Almost never	Sometimes	Almost all the time	All of the time
Cheer for good play for both teams	Never	Almost	Sometimes	Almost all	All of the

		never		the time	time
Cheer for athlete effort	Never	Almost never	Sometimes	Almost all the time	All of the time
Use profanity loud enough for athletes to hear	Never	Almost never	Sometimes	Almost all the time	All of the time
Show up to a practice or game intoxicated	Never	Almost never	Sometimes	Almost all the time	All of the time
Distract athletes from focusing on the game	Never	Almost never	Sometimes	Almost all the time	All of the time
Sit silently-and clap only when an athlete (or the team) does something good	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell something offensive to, or about, someone (e.g., athlete, parent, coach, referee(s))	Never	Almost never	Sometimes	Almost all the time	All of the time

4. In general on youth hockey sidelines, how **acceptable** is it for **mothers** to:

Yell at athletes on the ice (i.e., taunt, personally single an athlete out, harshly criticize, slam, name call, trash talk)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Act in a way that is embarrassing	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Act like a 'bad sport'	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate

Yell at the referee(s) (i.e., taunt, personally single out, harshly criticize, slam, name call)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Yell at the coach(es) (i.e., taunt, personally single out, harshly criticize, slam, name call)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Verbally 'get into it,' as in arguing or yelling with someone (another fan, parent, coach)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Physically 'get into it,' as in fighting, punching, choking or slapping someone (another fan, parent, coach)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
'Coach' from the sidelines (i.e., yell instructions to team and/or child)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Encourage the athletes to 'play rough' (i.e., push, elbow, take someone out, retaliate, cheap shots)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Encourage the athletes to play outside the rules (i.e., faking injury, shirt pulling, taking a dive)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Cheer for good play for both teams	1	2	3	4	5

	Never appropriate	Appropriate once in a while	Sometimes appropriate	Usually appropriate	Always appropriate
Cheer for athlete effort	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Use profanity loud enough for athletes to hear	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Show up to a practice or game intoxicated	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Distract athletes from focusing on the game	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Sit silently-and clap only when an athlete (or the team) does something good	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Yell something offensive to, or about, someone (e.g., athlete, parent, coach, referee(s))	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate

5. In general on youth hockey sidelines, how **acceptable** is it for **fathers** to:

Yell at athletes on the ice (i.e., taunt, personally single an athlete out, harshly criticize, slam, name call, trash talk)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Act in a way that is embarrassing	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Act like a 'bad sport'	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Yell at the referee(s) (i.e., taunt, personally single out, harshly criticize, slam, name call)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Yell at the coach(es) (i.e., taunt, personally single out, harshly criticize, slam, name call)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Verbally 'get into it,' as in arguing or yelling with someone (another fan, parent, coach)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Physically 'get into it,' as in fighting, punching, choking or slapping someone (another fan, parent, coach)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate

'Coach' from the sidelines (i.e., yell instructions to team and/or child)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Encourage the athletes to 'play rough' (i.e., push, elbow, take someone out, retaliate, cheap shots)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Encourage the athletes to play outside the rules (i.e., faking injury, shirt pulling, taking a dive)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Cheer for good play for both teams	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Cheer for athlete effort	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Use profanity loud enough for athletes to hear	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Show up to a practice or game intoxicated	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Distract athletes from focusing on the game	1	2	3	4	5

	Never appropriate	Appropriate once in a while	Sometimes appropriate	Usually appropriate	Always appropriate
Sit silently-and clap only when an athlete (or the team) does something good	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Yell something offensive to, or about, someone (e.g., athlete, parent, coach, referee(s))	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate

### PART III: HOCKEY PARENT SIDELINE BEHAVIOR IN SPECIFIC SITUATIONS

This is the last part of the survey. For each of the following 2 short hypothetical situations, please read the situation and answer the questions that follow. These are similar questions as you answered previously, but now will be related to a specific situation. Please answer honestly. There are no right or wrong answers for any of these questions and all answers will be kept completely anonymous.

[There are 8 situations in total, 2 on each topic (situations 1 and 2: referee incompetence, situations 3 and 4: athlete unsportsmanlike conduct, situations 5 and 6: coach incompetence, and situations 7 and 8: parent unsportsmanlike behavior). In this section, participants will be randomly given 2 situations on the same topic.]

**Situation 1.** You are watching your child's team play a game early in the season against a team that is not nearly as good as your child's team. It is 2 minutes into the game and the score is tied 0-0. The referee misses a call that was clearly a penalty against the opposition that results in the opposing team having a scoring chance.

1. In this situation, how likely do you think **mothers** are to:

Yell at athletes on the ice (i.e., taunt, personally single an athlete out, harshly criticize, slam, name call, trash talk)	Never	Almost never	Sometimes	Almost all the time	All of the time
Act in a way that is embarrassing	Never	Almost never	Sometimes	Almost all the time	All of the time
Act like a 'bad sport'	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell at the referee(s) (i.e., taunt, personally single out, harshly criticize, slam, name call)	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell at the coach(es) (i.e., taunt, personally single out, harshly criticize, slam, name call)	Never	Almost never	Sometimes	Almost all the time	All of the time
Verbally 'get into it,' as in arguing or yelling with someone (another fan, parent, coach)	Never	Almost never	Sometimes	Almost all the time	All of the time



Physically 'get into it,' as in fighting, punching, choking or slapping someone (another fan, parent, coach)	Never	Almost never	Sometimes	Almost all the time	All of the time
'Coach' from the sidelines (i.e., yell instructions to team and/or child)	Never	Almost never	Sometimes	Almost all the time	All of the time
Encourage the athletes to 'play rough' (i.e., push, elbow, take someone out, retaliate, cheap shots)	Never	Almost never	Sometimes	Almost all the time	All of the time
Encourage the athletes to play outside the rules (i.e., faking injury, shirt pulling, taking a dive)	Never	Almost never	Sometimes	Almost all the time	All of the time
Cheer for good play for both teams	Never	Almost never	Sometimes	Almost all the time	All of the time
Cheer for athlete effort	Never	Almost never	Sometimes	Almost all the time	All of the time
Use profanity loud enough for athletes to hear	Never	Almost never	Sometimes	Almost all the time	All of the time
Show up to a practice or game intoxicated	Never	Almost never	Sometimes	Almost all the time	All of the time
Distract athletes from focusing on the game	Never	Almost never	Sometimes	Almost all the time	All of the time
Sit silently-and clap only when an athlete (or the team) does something good	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell something offensive to, or about, someone (e.g., athlete, parent, coach, referee(s))	Never	Almost never	Sometimes	Almost all the time	All of the time

2. In this situation, how likely do you think **fathers** are to:

Yell at athletes on the ice (i.e., taunt, personally	Never	Almost	Sometimes	Almost all	All of the
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single an athlete out, harshly criticize, slam, name call, trash talk)		never		the time	time
Act in a way that is embarrassing	Never	Almost never	Sometimes	Almost all the time	All of the time
Act like a 'bad sport'	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell at the referee(s) (i.e., taunt, personally single out, harshly criticize, slam, name call)	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell at the coach(es) (i.e., taunt, personally single out, harshly criticize, slam, name call)	Never	Almost never	Sometimes	Almost all the time	All of the time
Verbally 'get into it,' as in arguing or yelling with someone (another fan, parent, coach)	Never	Almost never	Sometimes	Almost all the time	All of the time
Physically 'get into it,' as in fighting, punching, choking or slapping someone (another fan, parent, coach)	Never	Almost never	Sometimes	Almost all the time	All of the time
'Coach' from the sidelines (i.e., yell instructions to team and/or child)	Never	Almost never	Sometimes	Almost all the time	All of the time
Encourage the athletes to 'play rough' (i.e., push, elbow, take someone out, retaliate, cheap shots)	Never	Almost never	Sometimes	Almost all the time	All of the time
Encourage the athletes to play outside the rules (i.e., faking injury, shirt pulling, taking a dive)	Never	Almost never	Sometimes	Almost all the time	All of the time
Cheer for good play for both teams	Never	Almost never	Sometimes	Almost all the time	All of the time
Cheer for athlete effort	Never	Almost never	Sometimes	Almost all the time	All of the time
Use profanity loud enough for athletes to hear	Never	Almost never	Sometimes	Almost all the time	All of the time
Show up to a practice or game intoxicated	Never	Almost	Sometimes	Almost all	All of the

		never		the time	time
Distract athletes from focusing on the game	Never	Almost never	Sometimes	Almost all the time	All of the time
Sit silently-and clap only when an athlete (or the team) does something good	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell something offensive to, or about, someone (e.g., athlete, parent, coach, referee(s))	Never	Almost never	Sometimes	Almost all the time	All of the time

3. In this situation, how likely are **YOU** to:

Yell at athletes on the ice (i.e., taunt, personally single an athlete out, harshly criticize, slam, name call, trash talk)	Never	Almost never	Sometimes	Almost all the time	All of the time
Act in a way that is embarrassing	Never	Almost never	Sometimes	Almost all the time	All of the time
Act like a 'bad sport'	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell at the referee(s) (i.e., taunt, personally single out, harshly criticize, slam, name call)	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell at the coach(es) (i.e., taunt, personally single out, harshly criticize, slam, name call)	Never	Almost never	Sometimes	Almost all the time	All of the time
Verbally 'get into it,' as in arguing or yelling with someone (another fan, parent, coach)	Never	Almost never	Sometimes	Almost all the time	All of the time
Physically 'get into it,' as in fighting, punching, choking or slapping someone (another fan, parent, coach)	Never	Almost never	Sometimes	Almost all the time	All of the time
'Coach' from the sidelines (i.e., yell instructions to team and/or child)	Never	Almost never	Sometimes	Almost all the time	All of the time

Encourage the athletes to 'play rough' (i.e., push, elbow, take someone out, retaliate, cheap shots)	Never	Almost never	Sometimes	Almost all the time	All of the time
Encourage the athletes to play outside the rules (i.e., faking injury, shirt pulling, taking a dive)	Never	Almost never	Sometimes	Almost all the time	All of the time
Cheer for good play for both teams	Never	Almost never	Sometimes	Almost all the time	All of the time
Cheer for athlete effort	Never	Almost never	Sometimes	Almost all the time	All of the time
Use profanity loud enough for athletes to hear	Never	Almost never	Sometimes	Almost all the time	All of the time
Show up to a practice or game intoxicated	Never	Almost never	Sometimes	Almost all the time	All of the time
Distract athletes from focusing on the game	Never	Almost never	Sometimes	Almost all the time	All of the time
Sit silently-and clap only when an athlete (or the team) does something good	Never	Almost never	Sometimes	Almost all the time	All of the time
Yell something offensive to, or about, someone (e.g., athlete, parent, coach, referee(s))	Never	Almost never	Sometimes	Almost all the time	All of the time

4. In this situation, how **acceptable** is it for **mothers** to:

Yell at athletes on the ice (i.e., taunt, personally single an athlete out, harshly criticize, slam, name call, trash talk)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Act in a way that is embarrassing	1 Never	2 Appropriate	3 Sometimes	4 Usually	5 Always

	appropriate	once in a while	appropriate	appropriate	appropriate
Act like a 'bad sport'	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Yell at the referee(s) (i.e., taunt, personally single out, harshly criticize, slam, name call)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Yell at the coach(es) (i.e., taunt, personally single out, harshly criticize, slam, name call)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Verbally 'get into it,' as in arguing or yelling with someone (another fan, parent, coach)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Physically 'get into it,' as in fighting, punching, choking or slapping someone (another fan, parent, coach)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
'Coach' from the sidelines (i.e., yell instructions to team and/or child)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Encourage the athletes to 'play rough' (i.e., push, elbow, take someone out, retaliate, cheap shots)	1 Never appropriate	2 Appropriate once in a	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate

	1	2	3	4	5
Encourage the athletes to play outside the rules (i.e., faking injury, shirt pulling, taking a dive)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Cheer for good play for both teams	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Cheer for athlete effort	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Use profanity loud enough for athletes to hear	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Show up to a practice or game intoxicated	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Distract athletes from focusing on the game	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Sit silently-and clap only when an athlete (or the team) does something good	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate

Yell something offensive to, or about, someone (e.g., athlete, parent, coach, referee(s))	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
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5. In this situation, how **acceptable** is it for **fathers** to:

Yell at athletes on the ice (i.e., taunt, personally single an athlete out, harshly criticize, slam, name call, trash talk)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Act in a way that is embarrassing	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Act like a 'bad sport'	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Yell at the referee(s) (i.e., taunt, personally single out, harshly criticize, slam, name call)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Yell at the coach(es) (i.e., taunt, personally single out, harshly criticize, slam, name call)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate

Verbally 'get into it,' as in arguing or yelling with someone (another fan, parent, coach)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Physically 'get into it,' as in fighting, punching, choking or slapping someone (another fan, parent, coach)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
'Coach' from the sidelines (i.e., yell instructions to team and/or child)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Encourage the athletes to 'play rough' (i.e., push, elbow, take someone out, retaliate, cheap shots)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Encourage the athletes to play outside the rules (i.e., faking injury, shirt pulling, taking a dive)	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Cheer for good play for both teams	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Cheer for athlete effort	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Use profanity loud enough for athletes to hear	1	2	3	4	5



	Never appropriate	Appropriate once in a while	Sometimes appropriate	Usually appropriate	Always appropriate
Show up to a practice or game intoxicated	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Distract athletes from focusing on the game	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Sit silently-and clap only when an athlete (or the team) does something good	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate
Yell something offensive to, or about, someone (e.g., athlete, parent, coach, referee(s))	1 Never appropriate	2 Appropriate once in a while	3 Sometimes appropriate	4 Usually appropriate	5 Always appropriate

[NOTE: After each of the following situations, the same 5 questions are asked as in the previous situations (i.e., (1) In this situation, how likely do you think **mothers** are to... (2) In this situation, how likely do you think **fathers** are to... etc). For ease of reading here, I have not included the questions, just the situations. The full version can be provided if needed.]

**Situation 2.** You are watching your child's team play the last game of the season against a team that is very closely matched in ability to your child's team. The winner of this game will get a playoff spot and the losing team will be done for the season. There are 2 minutes left in the game, which is tied 1-1. The referee misses a call that was clearly a penalty against the opposition that results in the opposing team scoring a goal.

**Situation 3.** You are watching your child's team play a game early in the season against a team that is not nearly as good as your child's team. It is 2 minutes into the game and the score is tied 0-0. Your child and a player from the opposing team accidentally collide and fall onto the ice during a play. While they are getting back up, the athlete from the opposition pushes your child back down to the ice without the referee noticing.

**Situation 4.** You are watching your child's team play the last game of the season against a team that is very closely matched in ability to your child's team. The winner of this game will get a playoff spot and the losing team will be done for the season. There are 2 minutes left in the game, which is tied 1-1. Your child and a player from the opposing team accidentally collide and fall onto the ice during a play. While they are getting back up, the athlete from the opposition pushes your child back down to the ice without the referee noticing.

**Situation 5.** You are watching your child's team play a game early in the season against a team that is not nearly as good as your child's team. It is 2 minutes into the game and the score is tied 0-0. Your child's coach gives all the players equal playing time.

**Situation 6.** You are watching your child's team play the last game of the season against a team that is very closely matched in ability to your child's team. The winner of this game will get a playoff spot and the losing team will be done for the season. There are 2 minutes left in the game, which is tied 1-1. Your child's coach gives all the players equal playing time.

**Situation 7.** You are watching your child's team play a game early in the season against a team that is not nearly as good as your child's team. It is 2 minutes into the game and the score is tied 0-0. A parent from the opposition starts yelling at their child to "take them out," referring to an athlete on your child's team.

**Situation 8.** You are watching your child’s team play the last game of the season against a team that is very closely matched in ability to your child’s team. The winner of this game will get a playoff spot and the losing team will be done for the season. There are 2 minutes left in the game, which is tied 1-1. A parent from the opposition starts yelling at their child to “take them out,” referring to an athlete on your child’s team.

Do you have any other comments about parent sideline behavior in hockey related to this study?  
[open ended question for parents to leave comments]

Do you want to be entered in a random drawing to receive a \$25 gift card for Starbucks?

- Yes
- No

[If “yes”] Please answer the following questions so that you can be included in a random drawing for a Starbucks gift card. This information will not be associated with your survey responses.

First Name \_\_\_\_\_

Last Name \_\_\_\_\_

Email \_\_\_\_\_

[If “no”, or once they have filled out contact information if “yes”] Thank you for taking the time to complete this survey. We appreciate your willingness to participate and provide us with valuable information about the current climate of youth hockey. If you have any questions about this survey, please contact Julia Dutove at [dutov001@umn.edu](mailto:dutov001@umn.edu)

## Appendix E: Tables of Results

Table E1

*Hypothesis 1: Differences in Reports of Own General Sideline Behavior Between Mothers and Fathers (Baseball)*

Behavior	Fathers		Mothers		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the field	1.12	.366	1.03	.177	270	3.328 <sup>a</sup>	.001*	.01
Act in a way that is embarrassing	1.23	.465	1.14	.381	373	2.488 <sup>a</sup>	.013*	.01
Act like a ‘bad sport’	1.22	.495	1.09	.322	315	3.362 <sup>a</sup>	.001*	.01
Yell at the umpire	1.27	.521	1.12	.375	334	3.635 <sup>a</sup>	.000*	.01
Yell at the coach(es)	1.10	.312	1.02	.131	257	3.588 <sup>a</sup>	.000*	.01
Verbally ‘get into it’	1.16	.378	1.05	.241	312	3.961 <sup>a</sup>	.000*	.01
Physically ‘get into it’	1.01	.096	1.00	.000	215	1.418 <sup>a</sup>	.158	
‘Coach’ from the sidelines	2.41	1.113	2.24	1.004	614	1.928	.054	
Encourage athletes to ‘play rough’	1.13	.346	1.03	.178	276	3.897 <sup>a</sup>	.000*	.01
Encourage athletes to play outside the rules	1.04	.190	1.01	.086	262	2.180 <sup>a</sup>	.030*	.01
Cheer for good play for both teams	4.16	.755	4.30	.756	615	-2.264	.024*	.00
Cheer for athlete effort	4.40	.674	4.51	.667	616	-2.017	.043*	.00
Use profanity loud enough for athletes to hear	1.20	.463	1.11	.332	336	2.502 <sup>a</sup>	.013*	.01
Show up to a practice or game intoxicated	1.03	.177	1.01	.071	252	2.178 <sup>a</sup>	.030*	.01
Distract athletes from focusing on the game	1.22	.490	1.19	.417	383	0.872 <sup>a</sup>	.384	
Sit or stand silently and clap only when an athlete (or the team) does something good	2.90	1.200	2.75	1.282	467	1.414 <sup>a</sup>	.158	
Yell something offensive to, or about, someone	1.11	.406	1.04	.220	283	2.402 <sup>a</sup>	.017*	.01

*Note 1.* Each response above was prefaced with the stem “In general on baseball sidelines, how often do you:” See Appendix C for full survey.

*Note 2.* Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

*Note 3.* \* indicates significance at  $p < .05$

*Note 4.* <sup>a</sup>alternative t-test used because assumption of homogeneity of variance violated

Table E2

*Hypothesis 1: Differences in Reports of Own General Sideline Behavior Between Mothers and Fathers (Ice Hockey)*

Behavior	Fathers		Mothers		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the ice	1.25	.507	1.16	.514	322.680	1.921 <sup>a</sup>	.056	
Act in a way that is embarrassing	1.31	.519	1.29	.584	409	.335	.738	
Act like a 'bad sport'	1.32	.547	1.18	.493	290.847	2.598 <sup>a</sup>	.010*	.15
Yell at the referee	1.57	.687	1.26	.577	274.643	4.615 <sup>a</sup>	.000*	.27
Yell at the coach(es)	1.12	.323	1.09	.419	408	.714	.476	
Verbally 'get into it'	1.18	.420	1.15	.416	409	.839	.402	
Physically 'get into it'	1.03	.160	1.02	.196	409	.154	.877	
'Coach' from the sidelines	2.11	1.036	1.83	.885	281.239	2.815 <sup>a</sup>	.005*	.17
Encourage athletes to 'play rough'	1.28	.601	1.14	.490	270.542	2.399 <sup>a</sup>	.017*	.14
Encourage athletes to play outside the rules	1.08	.407	1.03	.214	200.907	1.346 <sup>a</sup>	.180	
Cheer for good play for both teams	3.88	.903	4.17	.829	409	-3.296	.001*	.16
Cheer for athlete effort	4.22	.802	4.44	.721	408	-2.864	.004*	.14
Use profanity loud enough for athletes to hear	1.22	.477	1.11	.422	286.365	2.379 <sup>a</sup>	.018*	.14
Show up to a practice or game intoxicated	1.02	.140	1.02	.196	408	-.194	.846	
Distract athletes from focusing on the game	1.15	.423	1.13	.403	406	.319	.750	
Sit or stand silently and clap only when an athlete (or the team) does something good	3.20	1.180	3.27	1.268	408	-.585	.559	
Yell something offensive to, or about, someone	1.13	.375	1.12	.397	409	.364	.716	

Note 1. Each response above was prefaced with the stem "In general on ice hockey sidelines, how often do you?" See Appendix D for full survey.

Note 2. Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

Note 3. \* indicates significance at  $p < .05$

Note 4. <sup>a</sup>alternative t-test used because assumption of homogeneity of variance violated

Table E3

*Hypothesis 2a: Differences in Reports of Other Parents' General Sideline Behavior Between Mothers and Fathers (Baseball)*

Behavior	Fathers		Mothers		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the field	1.90	.846	1.67	.731	624	-8.086	.000*	.01
Act in a way that is embarrassing	1.98	.826	1.86	.768	621	-4.346	.000*	.01
Act like a 'bad sport'	2.03	.847	1.84	.773	620	-6.807	.000*	.01
Yell at the umpire	2.01	.904	1.78	.810	617	-8.223	.000*	.01
Yell at the coach(es)	1.73	.800	1.54	.660	622	-7.703	.000*	.01
Verbally 'get into it'	1.69	.778	1.55	.683	621	-5.389	.000*	.01
Physically 'get into it'	1.19	.457	1.10	.316	601	-6.076	.000*	.01
'Coach' from the sidelines	2.97	.907	2.80	.870	615	-5.574	.000*	.01
Encourage athletes to 'play rough'	1.63	.788	1.44	.654	619	-7.563	.000*	.01
Encourage athletes to play outside the rules	1.44	.685	1.29	.538	618	-6.629	.000*	.01
Cheer for good play for both teams	3.58	.824	3.84	.724	620	9.930	.000*	.01
Cheer for athlete effort	3.92	.738	4.19	.648	614	11.053	.000*	.02
Use profanity loud enough for athletes to hear	1.79	.824	1.52	.658	611	-9.877	.000*	.01
Show up to a practice or game intoxicated	1.31	.562	1.19	.435	620	-6.365	.000*	.01
Distract athletes from focusing on the game	1.78	.824	1.67	.739	615	-4.324	.000*	.01
Sit or stand silently and clap only when an athlete (or the team) does something good	2.95	.900	3.11	.938	619	5.038	.000*	.01
Yell something offensive to, or about, someone	1.70	.802	1.52	.682	622	-6.732	.000*	.01

*Note 1.* Each response above was prefaced with the stem "In general on youth baseball sidelines, how often do mothers:" and "In general on youth baseball sidelines, how often do fathers:" See Appendix C for full survey.

*Note 2.* Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

*Note 3.* \* indicates significance at  $p < .05$

Table E4

*Hypothesis 2a: Differences in Reports of Other Parents' General Sideline Behavior Between Mothers and Fathers (Ice Hockey)*

Behavior	Fathers		Mothers		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the ice	2.54	.760	2.40	.785	414	-3.924	.000*	.19
Act in a way that is embarrassing	2.58	.724	2.55	.707	413	-1.148	.252	
Act like a 'bad sport'	2.62	.743	2.52	.720	411	-3.129	.002*	.15
Yell at the referee	2.72	.797	2.49	.781	412	-6.188	.000*	.29
Yell at the coach(es)	2.31	.818	2.05	.763	413	-7.692	.000*	.35
Verbally 'get into it'	2.26	.802	2.15	.751	413	-3.242	.001*	.16
Physically 'get into it'	1.49	.667	1.23	.443	413	-9.765	.000*	.43
'Coach' from the sidelines	3.13	.819	2.89	.932	414	-5.348	.000*	.25
Encourage athletes to 'play rough'	2.38	.876	2.09	.773	414	-7.193	.000*	.33
Encourage athletes to play outside the rules	1.81	.791	1.52	.648	413	-9.259	.000*	.41
Cheer for good play for both teams	3.23	.873	3.47	.798	408	6.041	.000*	.29
Cheer for athlete effort	3.72	.776	3.94	.744	405	6.534	.000*	.31
Use profanity loud enough for athletes to hear	2.25	.844	1.82	.755	412	-13.132	.000*	.54
Show up to a practice or game intoxicated	1.58	.694	1.31	.525	411	-9.409	.000*	.42
Distract athletes from focusing on the game	2.00	.771	1.73	.745	410	-8.723	.000*	.40
Sit or stand silently and clap only when an athlete (or the team) does something good	3.13	.818	3.27	.826	413	3.864	.000*	.19
Yell something offensive to, or about, someone	2.28	.818	1.94	.738	411	-9.801	.000*	.44

*Note 1.* Each response above was prefaced with the stem "In general on youth ice hockey sidelines, how often do mothers:" and "In general on youth ice hockey sidelines, how often do fathers:" See Appendix D for full survey.

*Note 2.* Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

*Note 3.* \* indicates significance at  $p < .05$

Table E5

*Hypothesis 2b: Differences in Reports of the Acceptability of Other Parents' General Sideline Behavior Between Mothers and Fathers (Baseball)*

Behavior	Fathers		Mothers		df	t	p
	M	SD	M	SD			
Yell at athletes on the field	1.02	.222	1.02	.187	623	-1.388	.166
Act in a way that is embarrassing	1.06	.277	1.06	.292	618	-.218	.827
Act like a 'bad sport'	1.03	.211	1.02	.211	620	-.500	.617
Yell at the umpire	1.07	.293	1.06	.292	617	-1.608	.108
Yell at the coach(es)	1.02	.199	1.03	.262	620	.378	.706
Verbally 'get into it'	1.03	.235	1.03	.242	621	.000	1.000
Physically 'get into it'	1.01	.166	1.01	.161	615	-1.000	.318
'Coach' from the sidelines	1.85	.909	1.83	.842	623	-1.264	.207
Encourage athletes to 'play rough'	1.04	.273	1.03	.236	618	-1.266	.206
Encourage athletes to play outside the rules	1.02	.196	1.02	.237	620	.218	.827
Cheer for good play for both teams	4.78	.611	4.82	.556	621	1.929	.054
Cheer for athlete effort	4.85	.513	4.87	.487	620	1.415	.157
Use profanity loud enough for athletes to hear	1.02	.191	1.01	.187	601	-1.343	.180
Show up to a practice or game intoxicated	1.01	.185	1.01	.166	612	-1.000	.318
Distract athletes from focusing on the game	1.07	.306	1.06	.279	612	-.943	.346
Sit or stand silently and clap only when an athlete (or the team) does something good	3.33	1.515	3.36	1.504	613	1.143	.253
Yell something offensive to, or about, someone	1.05	.367	1.03	.269	614	-1.288	.198

*Note 1.* Each response above was prefaced with the stem "In general on youth baseball sidelines, how acceptable is it for mothers to:" and "In general on youth baseball sidelines, how acceptable is it for fathers to:" See Appendix C for full survey.

*Note 2.* Responses were 1 = Never appropriate, 2 = Appropriate once in a while, 3 = Sometimes appropriate, 4 = Usually appropriate, 5 = Always appropriate

*Note 3.* \* indicates significance at  $p < .05$



Table E6

*Hypothesis 2b: Differences in Reports of the Acceptability of Other Parents' General Sideline Behavior Between Mothers and Fathers (Ice Hockey)*

Behavior	Fathers		Mothers		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the ice	1.05	.265	1.04	.237	413	-.534	.594	
Act in a way that is embarrassing	1.09	.352	1.09	.338	414	.000	1.000	
Act like a 'bad sport'	1.03	.229	1.02	.169	410	-1.266	.206	
Yell at the referee	1.12	.419	1.12	.391	410	.242	.809	
Yell at the coach(es)	1.05	.261	1.04	.227	413	-.378	.706	
Verbally 'get into it'	1.08	.323	1.07	.292	410	-4.71	.638	
Physically 'get into it'	1.01	.110	1.01	.110	411	.000	1.000	
'Coach' from the sidelines	1.56	.795	1.51	.727	410	-1.925	.055	
Encourage athletes to 'play rough'	1.10	.446	1.10	.425	411	-.267	.790	
Encourage athletes to play outside the rules	1.03	.264	1.02	.231	411	-.822	.412	
Cheer for good play for both teams	4.76	.637	4.77	.613	412	.686	.493	
Cheer for athlete effort	4.83	.543	4.85	.510	410	.801	.423	
Use profanity loud enough for athletes to hear	1.04	.261	1.03	.188	414	-1.903	.058	
Show up to a practice or game intoxicated	1.01	.139	1.01	.120	411	-1.416	.158	
Distract athletes from focusing on the game	1.04	.212	1.03	.201	412	-1.000	.318	
Sit or stand silently and clap only when an athlete (or the team) does something good	3.77	1.465	3.84	1.410	412	1.208	.228	
Yell something offensive to, or about, someone	1.08	.416	1.04	.242	414	-2.069	.039*	.10

*Note 1.* Each response above was prefaced with the stem "In general on youth ice hockey sidelines, how acceptable is it for mothers to:" and "In general on youth ice hockey sidelines, how acceptable is it for fathers to:" See Appendix D for full survey.

*Note 2.* Responses were 1 = Never appropriate, 2 = Appropriate once in a while, 3 = Sometimes appropriate, 4 = Usually appropriate, 5 = Always appropriate

*Note 3.* \* indicates significance at  $p < .05$

Table E7

*Hypothesis 3a: Differences Self-Reported Displays of Poor Sideline Behavior Between Parents with Low and High Sport Experience (Baseball)*

Behavior	Low sport experience		High sport experience		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the field	1.02	.135	1.12	.349	134	-2.823 <sup>a</sup>	.005*	.02
Act in a way that is embarrassing	1.08	.314	1.30	.517	167	-4.092 <sup>a</sup>	.000*	.02
Act like a 'bad sport'	1.07	.275	1.31	.616	142	-3.950 <sup>a</sup>	.000*	.03
Yell at the umpire	1.04	.189	1.45	.629	124	-6.728 <sup>a</sup>	.000*	.04
Yell at the coach(es)	1.01	.111	1.14	.376	124	-3.566 <sup>a</sup>	.001*	.03
Verbally 'get into it'	1.03	.174	1.21	.433	136	-4.242 <sup>a</sup>	.000*	.03
Physically 'get into it'	1.00	.000	1.01	.094	111	-1.000 <sup>a</sup>	.319	
'Coach' from the sidelines	2.10	.957	2.51	1.086	272	-3.338	.001*	.01
Encourage athletes to 'play rough'	1.01	.078	1.18	.407	117	-4.423 <sup>a</sup>	.000*	.03
Encourage athletes to play outside the rules	1.01	.078	1.05	.208	131	-1.879 <sup>a</sup>	.062	
Cheer for good play for both teams	4.28	.748	4.20	.837	273	.827	.409	
Cheer for athlete effort	4.41	.682	4.49	.644	273	-.978	.329	
Use profanity loud enough for athletes to hear	1.05	.217	1.25	.515	136	-3.949 <sup>a</sup>	.000*	.03
Show up to a practice or game intoxicated	1.01	.110	1.02	.133	273	-.379	.705	
Distract athletes from focusing on the game	1.12	.360	1.26	.515	184	-2.500 <sup>a</sup>	.013	
Sit or stand silently and clap only when an athlete (or the team) does something good	2.96	1.281	2.86	1.222	273	.687	.492	
Yell something offensive to, or about, someone	1.03	.206	1.14	.351	163	-3.039 <sup>a</sup>	.003*	.02

Note 1. Low sport experience n=163, High sport experience n=112

Note 2. Each response above was prefaced with the stem "In general on baseball sidelines, how often do you?" See Appendix C for full survey.

Note 3. Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

Note 4. \* indicates significance at  $p < .05$

Note 5. <sup>a</sup>alternative t-test used because assumption of homogeneity of variance violated

Table E8

*Hypothesis 3a: Differences Self-Reported Displays of Poor Sideline Behavior Between Parents with Low and High Sport Experience (Ice Hockey)*

Behavior	Low sport experience		High sport experience		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the ice	1.15	.516	1.26	.525	143.618	-1.379 <sup>a</sup>	.170	
Act in a way that is embarrassing	1.26	.547	1.24	.432	221	.162	.872	
Act like a 'bad sport'	1.19	.456	1.36	.632	109.913	-2.031 <sup>a</sup>	.045*	.19
Yell at the referee	1.28	.605	1.58	.665	131.695	-3.181 <sup>a</sup>	.002*	.27
Yell at the coach(es)	1.09	.440	1.12	.329	221	-.478	.633	
Verbally 'get into it'	1.14	.451	1.25	.446	221	-1.179	.240	
Physically 'get into it'	1.03	.231	1.04	.199	221	-.436	.663	
'Coach' from the sidelines	1.82	.916	2.04	1.013	221	-1.643	.102	
Encourage athletes to 'play rough'	1.15	.542	1.31	.618	130.086	-1.853 <sup>a</sup>	.066	
Encourage athletes to play outside the rules	1.04	.257	1.08	.490	221	-.817	.415	
Cheer for good play for both teams	4.17	.868	3.85	.989	221	2.498	.013*	.17
Cheer for athlete effort	4.42	.745	4.23	.745	221	1.663	.098	
Use profanity loud enough for athletes to hear	1.11	.443	1.26	.443	123.175	-2.040 <sup>a</sup>	.043*	.18
Show up to a practice or game intoxicated	1.03	.231	1.03	.164	220	-.018	.985	
Distract athletes from focusing on the game	1.15	.461	1.15	.462	220	.056	.956	
Sit or stand silently and clap only when an athlete (or the team) does something good	3.36	1.285	3.22	1.170	220	.803	.423	
Yell something offensive to, or about, someone	1.12	.449	1.14	.382	221	-.235	.814	

Note 1. Low sport experience n=149, High sport experience n=74

Note 2. Each response above was prefaced with the stem "In general on ice hockey sidelines, how often do you?" See Appendix D for full survey.

Note 3. Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

Note 4. \* indicates significance at  $p < .05$

Note 5. <sup>a</sup>alternative t-test used because assumption of homogeneity of variance violated

Table E9

*Hypothesis 3b: Differences in Reports of Acceptability of Mothers' Sideline Behavior Between Parents with Low and High Sport Experience (Baseball)*

Behavior	Low sport experience		High sport experience		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the field	1.00	.000	1.04	.389	111	-1.215 <sup>a</sup>	.227	
Act in a way that is embarrassing	1.04	.189	1.15	.528	128	-2.244 <sup>a</sup>	.027*	.02
Act like a 'bad sport'	1.00	.000	1.07	.418	111	-1.807 <sup>a</sup>	.073	
Yell at the umpire	1.03	.173	1.14	.483	129	-2.372 <sup>a</sup>	.019*	.02
Yell at the coach(es)	1.01	.078	1.04	.378	273	-.970	.333	
Verbally 'get into it'	1.01	.079	1.10	.464	115	-2.078 <sup>a</sup>	.040*	.02
Physically 'get into it'	1.00	.000	1.04	.380	110	-1.000 <sup>a</sup>	.320	
'Coach' from the sidelines	1.80	.840	1.73	.859	273	.628	.530	
Encourage athletes to 'play rough'	1.01	.110	1.09	.436	121	-1.829 <sup>a</sup>	.070	
Encourage athletes to play outside the rules	1.00	.000	1.08	.539	111	-1.577 <sup>a</sup>	.118	
Cheer for good play for both teams	4.85	.487	4.79	.602	273	.882	.379	
Cheer for athlete effort	4.89	.445	4.88	.504	273	.253	.801	
Use profanity loud enough for athletes to hear	1.00	.000	1.05	.391	110	-1.215 <sup>a</sup>	.227	
Show up to a practice or game intoxicated	1.00	.000	1.04	.380	110	-1.000 <sup>a</sup>	.320	
Distract athletes from focusing on the game	1.03	.157	1.15	.492	125	-2.671 <sup>a</sup>	.009*	.02
Sit or stand silently and clap only when an athlete (or the team) does something good	3.42	1.536	3.55	1.387	269	-.760	.448	
Yell something offensive to, or about, someone	1.00	.000	1.05	.401	110	-1.421 <sup>a</sup>	.158	

Note 1. Low sport experience n=163, High sport experience n=112

Note 2. Each response above was prefaced with the stem "In general on youth baseball sidelines, how acceptable is it for mothers to:" See Appendix C for full survey.

Note 3. Responses were 1 = Never appropriate, 2 = Appropriate once in a while, 3 = Sometimes appropriate, 4 = Usually appropriate, 5 = Always appropriate

Note 4. \* indicates significance at  $p < .05$

Note 5. <sup>a</sup>alternative t-test used because assumption of homogeneity of variance violated

Table E10

*Hypothesis 3b: Differences in Reports of Acceptability of Fathers' Sideline Behavior Between Parents with Low and High Sport Experience (Baseball)*

Behavior	Low sport experience		High sport experience		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the field	1.00	.000	1.05	.351	111	-1.615 <sup>a</sup>	.109	
Act in a way that is embarrassing	1.04	.220	1.14	.415	152	-2.279 <sup>a</sup>	.024*	.02
Act like a 'bad sport'	1.00	.000	1.06	.308	111	-2.144 <sup>a</sup>	.034*	.02
Yell at the umpire	1.03	.173	1.15	.388	139	-3.147 <sup>a</sup>	.002*	.02
Yell at the coach(es)	1.01	.110	1.04	.299	272	-.926	.355	
Verbally 'get into it'	1.01	.078	1.09	.393	117	-2.212 <sup>a</sup>	.029*	.02
Physically 'get into it'	1.00	.000	1.04	.378	111	-1.000 <sup>a</sup>	.319	
'Coach' from the sidelines	1.85	.927	1.72	.841	273	1.126	.261	
Encourage athletes to 'play rough'	1.01	.078	1.09	.438	115	-1.998 <sup>a</sup>	.048*	.02
Encourage athletes to play outside the rules	1.00	.000	1.05	.392	109	-1.215 <sup>a</sup>	.227	
Cheer for good play for both teams	4.80	.620	4.72	.703	272	.953	.341	
Cheer for athlete effort	4.85	.573	4.79	.632	273	.709	.479	
Use profanity loud enough for athletes to hear	1.01	.079	1.05	.313	120	-1.278 <sup>a</sup>	.204	
Show up to a practice or game intoxicated	1.00	.000	1.04	.380	110	-1.000 <sup>a</sup>	.320	
Distract athletes from focusing on the game	1.02	.155	1.14	.481	127	-2.513 <sup>a</sup>	.013*	.02
Sit or stand silently and clap only when an athlete (or the team) does something good	3.43	1.515	3.48	1.432	270	-.305	.760	
Yell something offensive to, or about, someone	1.02	.313	1.04	.298	273	-.296	.767	

Note 1. Low sport experience n=163, High sport experience n=112

Note 2. Each response above was prefaced with the stem "In general on youth baseball sidelines, how acceptable is it for fathers to:." See Appendix C for full survey.

Note 3. Responses were 1 = Never appropriate, 2 = Appropriate once in a while, 3 = Sometimes appropriate, 4 = Usually appropriate, 5 = Always appropriate

Note 4. \* indicates significance at  $p < .05$

Note 5. <sup>a</sup>alternative t-test used because assumption of homogeneity of variance violated

Table E11

*Hypothesis 3b: Differences in Reports of Acceptability of Mothers' Sideline Behavior Between Parents with Low and High Sport Experience (Ice Hockey)*

Behavior	Low sport experience		High sport experience		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the ice	1.02	.141	1.04	.259	221	-.763	.446	
Act in a way that is embarrassing	1.10	.363	1.05	.281	221	.969	.333	
Act like a 'bad sport'	1.01	.115	1.04	.259	87.758	-.861 <sup>a</sup>	.392	
Yell at the referee	1.10	.317	1.08	.321	219	.312	.755	
Yell at the coach(es)	1.03	.162	1.04	.259	221	-.483	.629	
Verbally 'get into it'	1.07	.278	1.05	.283	219	.320	.750	
Physically 'get into it'	1.00	.000	1.03	.232	73.000	-1.000 <sup>a</sup>	.321	
'Coach' from the sidelines	1.46	.692	1.54	.686	221	-.857	.392	
Encourage athletes to 'play rough'	1.09	.480	1.07	.302	220	.332	.740	
Encourage athletes to play outside the rules	1.00	.000	1.03	.232	73.000	-1.000 <sup>a</sup>	.321	
Cheer for good play for both teams	4.80	.545	4.81	.616	220	-.118	.907	
Cheer for athlete effort	4.86	.446	4.84	.597	220	.378	.705	
Use profanity loud enough for athletes to hear	1.01	.115	1.03	.232	221	-.585	.559	
Show up to a practice or game intoxicated	1.01	.082	1.03	.232	220	-.950	.343	
Distract athletes from focusing on the game	1.01	.082	1.07	.302	78.378	-1.702 <sup>a</sup>	.093	
Sit or stand silently and clap only when an athlete (or the team) does something good	3.74	1.534	3.86	1.358	221	-.570	.569	
Yell something offensive to, or about, someone	1.04	.229	1.03	.232	221	.405	.686	

Note 1. Low sport experience n=149, High sport experience n=74

Note 2. Each response above was prefaced with the stem "In general on youth ice hockey sidelines, how acceptable is it for mothers to:" See Appendix D for full survey.

Note 3. Responses were 1 = Never appropriate, 2 = Appropriate once in a while, 3 = Sometimes appropriate, 4 = Usually appropriate, 5 = Always appropriate

Note 4. \* indicates significance at  $p < .05$

Note 5. <sup>a</sup>alternative t-test used because assumption of homogeneity of variance violated

Table E12

*Hypothesis 3b: Differences in Reports of Acceptability of Fathers' Sideline Behavior Between Parents with Low and High Sport Experience (Ice Hockey)*

Behavior	Low sport experience		High sport experience		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the ice	1.03	.162	1.05	.281	221	-.914	.362	
Act in a way that is embarrassing	1.11	.388	1.07	.302	221	.774	.440	
Act like a 'bad sport'	1.01	.116	1.08	.321	82.655	-1.755 <sup>a</sup>	.083	
Yell at the referee	1.07	.287	1.11	.391	221	-.742	.459	
Yell at the coach(es)	1.02	.141	1.05	.281	91.609	-.978 <sup>a</sup>	.331	
Verbally 'get into it'	1.05	.254	1.08	.361	221	-.655	.513	
Physically 'get into it'	1.00	.000	1.04	.259	73.000	-1.349 <sup>a</sup>	.181	
'Coach' from the sidelines	1.46	.695	1.59	.775	219	-1.282	.201	
Encourage athletes to 'play rough'	1.07	.406	1.15	.589	108.630	-.975 <sup>a</sup>	.332	
Encourage athletes to play outside the rules	1.01	.116	1.09	.528	76.537	-1.306 <sup>a</sup>	.196	
Cheer for good play for both teams	4.78	.568	4.77	.673	221	.096	.924	
Cheer for athlete effort	4.86	.452	4.82	.649	220	.452	.652	
Use profanity loud enough for athletes to hear	1.02	.141	1.04	.259	221	-.763	.446	
Show up to a practice or game intoxicated	1.01	.082	1.03	.232	220	-.950	.343	
Distract athletes from focusing on the game	1.01	.082	1.09	.338	77.349	-2.203 <sup>a</sup>	.031*	.24
Sit or stand silently and clap only when an athlete (or the team) does something good	3.70	1.546	3.81	1.496	219	-.505	.614	
Yell something offensive to, or about, someone	1.11	.559	1.08	.361	221	.398	.713	

Note 1. Low sport experience n=149, High sport experience n=74

Note 2. Each response above was prefaced with the stem "In general on youth ice hockey sidelines, how acceptable is it for fathers to:" See Appendix D for full survey.

Note 3. Responses were 1 = Never appropriate, 2 = Appropriate once in a while, 3 = Sometimes appropriate, 4 = Usually appropriate, 5 = Always appropriate

Note 4. \* indicates significance at  $p < .05$

Note 5. <sup>a</sup>alternative t-test used because assumption of homogeneity of variance violated

Table E13

*Hypothesis 4a: Differences in Reports of Mothers' Sideline Behavior Between Baseball and Ice Hockey*

Behavior	Hockey		Baseball		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the field/ice	2.40	.785	1.67	.731	1038	15.181	.000*	.43
Act in a way that is embarrassing	2.55	.707	1.86	.768	1035	14.631	.000*	.41
Act like a 'bad sport'	2.52	.719	1.84	.773	1033	14.239	.000*	.41
Yell at the referee/umpire	2.49	.781	1.78	.810	1032	13.900	.000*	.40
Yell at the coach(es)	2.05	.763	1.54	.659	1037	11.351	.000*	.33
Verbally 'get into it'	2.15	.751	1.55	.683	1035	13.227	.000*	.38
Physically 'get into it'	1.23	.443	1.10	.314	691.436	5.174 <sup>a</sup>	.000*	.19
'Coach' from the sidelines	2.89	.932	2.80	.869	1032	1.591	.112	
Encourage athletes to 'play rough'	2.09	.773	1.44	.654	1035	14.649	.000*	.41
Encourage athletes to play outside the rules	1.52	.648	1.29	.538	770.678	6.022 <sup>a</sup>	.000*	.21
Cheer for good play for both teams	3.47	.796	3.84	.724	821.861	-7.622 <sup>a</sup>	.000*	.26
Cheer for athlete effort	3.93	.742	4.19	.646	1029	-5.854	.000*	.18
Use profanity loud enough for athletes to hear	1.82	.754	1.52	.659	1032	6.810	.000*	.21
Show up to a practice or game intoxicated	1.31	.526	1.19	.435	765.602	3.632 <sup>a</sup>	.000*	.13
Distract athletes from focusing on the game	1.73	.744	1.67	.738	1030	1.283	.200	
Sit or stand silently and clap only when an athlete (or the team) does something good	3.27	.826	3.12	.937	1035	2.704	.007*	.08
Yell something offensive to, or about, someone	1.95	.739	1.52	.682	1035	9.629	.000*	.29

Note 1. Baseball n = 625, Ice Hockey n = 415

Note 2. Each response above was prefaced with the stem "In general on baseball/ice hockey sidelines, how often do mothers:?" See Appendix C/D for full survey.

Note 3. Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

Note 4. \* indicates significance at  $p < .05$

Note 5. <sup>a</sup>alternative t-test used because assumption of homogeneity of variance violated



Table E14

*Hypothesis 4a: Differences in Reports of Fathers' Sideline Behavior Between Baseball and Ice Hockey*

Behavior	Hockey		Baseball		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the field/ice	2.54	.760	1.90	.846	1038	12.333	.000*	.36
Act in a way that is embarrassing	2.58	.724	1.98	.824	1037	12.125	.000*	.35
Act like a 'bad sport'	2.62	.746	2.03	.848	957.796	11.803 <sup>a</sup>	.000*	.36
Yell at the referee/umpire	2.73	.803	2.01	.904	955.463	13.425 <sup>a</sup>	.000*	.40
Yell at the coach(es)	2.31	.818	1.73	.800	1036	11.417	.000*	.33
Verbally 'get into it'	2.26	.802	1.69	.779	1037	11.518	.000*	.34
Physically 'get into it'	1.49	.667	1.19	.461	675.891	7.941 <sup>a</sup>	.000*	.29
'Coach' from the sidelines	3.13	.819	2.98	.906	1035	2.746	.006*	.09
Encourage athletes to 'play rough'	2.38	.876	1.63	.787	821.073	14.049 <sup>a</sup>	.000*	.44
Encourage athletes to play outside the rules	1.80	.791	1.44	.685	798.115	7.727 <sup>a</sup>	.000*	.26
Cheer for good play for both teams	3.23	.870	3.58	.825	1035	-6.486	.000*	.20
Cheer for athlete effort	3.72	.775	3.92	.740	844.272	-4.223 <sup>a</sup>	.000*	.14
Use profanity loud enough for athletes to hear	2.25	.846	1.79	.824	1026	8.694	.000*	.26
Show up to a practice or game intoxicated	1.58	.694	1.30	.561	755.527	6.725 <sup>a</sup>	.000*	.24
Distract athletes from focusing on the game	2.00	.773	1.77	.823	922.317	4.524 <sup>a</sup>	.000*	.15
Sit or stand silently and clap only when an athlete (or the team) does something good	3.13	.817	2.95	.899	1034	3.230	.001*	.10
Yell something offensive to, or about, someone	2.28	.818	1.70	.801	1036	11.162	.000*	.33

Note 1. Baseball n = 625, Ice Hockey n = 415

Note 2. Each response above was prefaced with the stem "In general on baseball/ice hockey sidelines, how often do fathers:." See Appendix C/D for full survey.

Note 3. Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

Note 4. \* indicates significance at  $p < .05$

Note 5. <sup>a</sup>alternative t-test used because assumption of homogeneity of variance violated

Table E15

*Hypothesis 4b: Differences in Reports of Own Sideline Behavior Between Baseball and Ice Hockey*

Behavior	Hockey		Baseball		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the field/ice	1.19	.512	1.06	.264	561.229	4.723 <sup>a</sup>	.000*	.20
Act in a way that is embarrassing	1.30	.558	1.17	.414	709.023	3.977 <sup>a</sup>	.000*	.15
Act like a 'bad sport'	1.24	.518	1.14	.401	729.412	3.295 <sup>a</sup>	.001*	.12
Yell at the referee/umpire	1.38	.641	1.17	.437	666.643	5.741 <sup>a</sup>	.000*	.22
Yell at the coach(es)	1.10	.378	1.04	.215	538.242	2.713 <sup>a</sup>	.007*	.12
Verbally 'get into it'	1.16	.416	1.09	.301	697.843	3.120 <sup>a</sup>	.002*	.12
Physically 'get into it'	1.02	.182	1.00	.057	467.787	2.262 <sup>a</sup>	.024*	.10
'Coach' from the sidelines	1.93	.951	2.30	1.053	944.070	-5.831 <sup>a</sup>	.000*	.19
Encourage athletes to 'play rough'	1.19	.535	1.06	.252	537.712	4.685 <sup>a</sup>	.000*	.20
Encourage athletes to play outside the rules	1.05	.299	1.02	.132	520.461	1.960 <sup>a</sup>	.050	
Cheer for good play for both teams	4.07	.864	4.25	.756	1037	-3.709	.000*	.11
Cheer for athlete effort	4.35	.757	4.47	.670	808.568	-2.639 <sup>a</sup>	.008*	.09
Use profanity loud enough for athletes to hear	1.15	.444	1.14	.383	1030	.626	.531	
Show up to a practice or game intoxicated	1.02	.176	1.01	.119	1035	.795	.427	
Distract athletes from focusing on the game	1.14	.418	1.20	.442	913.279	-2.130 <sup>a</sup>	.033*	.07
Sit or stand silently and clap only when an athlete (or the team) does something good	3.25	1.233	2.80	1.259	1033	5.671	.000*	.17
Yell something offensive to, or about, someone	1.12	.389	1.07	.301	732.655	2.521 <sup>a</sup>	.012*	.09

Note 1. Baseball n = 625, Ice Hockey n = 415

Note 2. Each response above was prefaced with the stem "In general on baseball/ice hockey sidelines, how often do you:" See Appendix C/D for full survey.

Note 3. Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

Note 4. \* indicates significance at  $p < .05$

Note 5. <sup>a</sup>alternative t-test used because assumption of homogeneity of variance violated

Table E16

*Hypothesis 4c: Differences in Acceptability of Mothers' Sideline Behavior Between Baseball and Ice Hockey*

Behavior	Ice hockey		Baseball		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the field/ice	1.04	.237	1.02	.187	744.270	1.977 <sup>a</sup>	.048*	.07
Act in a way that is embarrassing	1.09	.338	1.06	.291	794.671	1.542 <sup>a</sup>	.124	
Act like a 'bad sport'	1.02	.169	1.02	.211	1033	.137	.891	
Yell at the referee/umpire	1.12	.391	1.06	.292	703.979	2.865 <sup>a</sup>	.004*	.11
Yell at the coach(es)	1.04	.227	1.03	.262	965.551	1.055 <sup>a</sup>	.292	
Verbally 'get into it'	1.07	.295	1.03	.242	758.218	2.234 <sup>a</sup>	.026*	.08
Physically 'get into it'	1.01	.110	1.01	.161	1032	.088	.930	
'Coach' from the sidelines	1.51	.726	1.83	.842	965.967	-6.400 <sup>a</sup>	.000*	.20
Encourage athletes to 'play rough'	1.10	.424	1.03	.235	581.139	2.897 <sup>a</sup>	.004*	.12
Encourage athletes to play outside the rules	1.02	.230	1.02	.236	1036	.114	.909	
Cheer for good play for both teams	4.77	.612	4.81	.556	824.943	-1.100 <sup>a</sup>	.272	
Cheer for athlete effort	4.85	.517	4.87	.486	1034	-.737	.461	
Use profanity loud enough for athletes to hear	1.03	.188	1.01	.185	879.181	1.262 <sup>a</sup>	.207	
Show up to a practice or game intoxicated	1.01	.120	1.01	.166	1028	.167	.868	
Distract athletes from focusing on the game	1.03	.200	1.06	.279	1023.961	-2.041 <sup>a</sup>	.042*	.06
Sit or stand silently and clap only when an athlete (or the team) does something good	3.83	1.414	3.35	1.506	924.801	5.244 <sup>a</sup>	.000*	.17
Yell something offensive to, or about, someone	1.04	.242	1.03	.269	1028	.810	.418	

Note 1. Baseball n = 625, Ice Hockey n = 415

Note 2. Each response above was prefaced with the stem "In this situation, how acceptable is it for mothers to:" See Appendix C/D for full survey.

Note 3. Responses were 1 = Never appropriate, 2 = Appropriate once in a while, 3 = Sometimes appropriate, 4 = Usually appropriate, 5 = Always appropriate

Note 4. \* indicates significance at  $p < .05$

Note 5. <sup>a</sup>alternative t-test used because assumption of homogeneity of variance violated

Table E17

*Hypothesis 4c: Differences in Acceptability of Fathers' Sideline Behavior Between Baseball and Ice Hockey*

Behavior	Ice hockey		Baseball		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the field/ice	1.05	.265	1.02	.222	773.924	1.542 <sup>a</sup>	.123	
Act in a way that is embarrassing	1.09	.352	1.06	.276	740.778	1.445 <sup>a</sup>	.149	
Act like a 'bad sport'	1.03	.229	1.03	.210	1035	.598	.550	
Yell at the referee/umpire	1.12	.417	1.07	.292	678.418	2.113 <sup>a</sup>	.035*	.08
Yell at the coach(es)	1.05	.261	1.02	.199	724.427	1.443 <sup>a</sup>	.149	
Verbally 'get into it'	1.07	.321	1.03	.234	697.918	2.247 <sup>a</sup>	.025*	.08
Physically 'get into it'	1.01	.110	1.01	.165	1032	-.085	.932	
'Coach' from the sidelines	1.55	.794	1.85	.909	958.997	-5.559 <sup>a</sup>	.000*	.18
Encourage athletes to 'play rough'	1.10	.445	1.04	.273	617.717	2.639 <sup>a</sup>	.009*	.11
Encourage athletes to play outside the rules	1.03	.263	1.02	.196	706.967	1.016 <sup>a</sup>	.310	
Cheer for good play for both teams	4.76	.637	4.78	.610	1035	-.570	.569	
Cheer for athlete effort	4.84	.541	4.85	.512	1034	-.317	.751	
Use profanity loud enough for athletes to hear	1.04	.261	1.02	.188	696.231	1.661 <sup>a</sup>	.097	
Show up to a practice or game intoxicated	1.01	.139	1.01	.184	1032	.307	.759	
Distract athletes from focusing on the game	1.04	.212	1.07	.303	1031.260	-1.944 <sup>a</sup>	.052	
Sit or stand silently and clap only when an athlete (or the team) does something good	3.77	1.465	3.34	1.513	1030	4.597	.000*	.14
Yell something offensive to, or about, someone	1.08	.416	1.04	.364	804.795	1.289 <sup>a</sup>	.198	

Note 1. Baseball n = 625, Ice Hockey n = 415

Note 2. Each response above was prefaced with the stem "In this situation, how acceptable is it for fathers to:" See Appendix C/D for full survey.

Note 3. Responses were 1 = Never appropriate, 2 = Appropriate once in a while, 3 = Sometimes appropriate, 4 = Usually appropriate, 5 = Always appropriate

Note 4. \* indicates significance at  $p < .05$

Note 5. <sup>a</sup>alternative t-test used because assumption of homogeneity of variance violated

Table E18

*Hypothesis 5a: Differences in Reports of Other Parents' Sideline Behavior Between High and Low Stakes Situations of Athlete Unsportsmanlike Behavior (Baseball, Mothers Only)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the field	1.50	.650	1.61	.796	152	-2.038	.043*	.01
Act in a way that is embarrassing	1.38	.598	1.54	.729	149	-2.897	.004*	.02
Act like a 'bad sport'	1.38	.596	1.49	.736	152	-2.100	.037*	.01
Yell at the umpire	1.33	.572	1.47	.708	152	-2.682	.008*	.02
Yell at the coach(es)	1.31	.530	1.42	.688	149	-2.644	.009*	.02
Verbally 'get into it'	1.31	.529	1.37	.637	152	-1.550	.123	
Physically 'get into it'	1.09	.281	1.14	.389	151	-2.358	.020*	.02
'Coach' from the sidelines	2.16	.942	2.19	1.043	152	-.399	.691	
Encourage athletes to 'play rough'	1.14	.366	1.23	.496	150	-2.605	.010*	.02
Encourage athletes to play outside the rules	1.13	.338	1.22	.476	152	-2.700	.008*	.02
Cheer for good play for both teams	3.68	1.176	3.76	1.092	151	-.756	.451	
Cheer for athlete effort	3.77	1.171	3.91	1.029	151	-1.786	.076	
Use profanity loud enough for athletes to hear	1.32	.570	1.40	.590	150	-2.300	.023*	.01
Distract athletes from focusing on the game	1.38	.639	1.49	.699	152	-2.242	.026*	.01
Sit or stand silently and clap only when an athlete (or the team) does something good	3.01	1.256	2.94	1.294	152	.939	.349	
Yell something offensive to, or about, someone	1.45	.708	1.45	.698	151	.112	.911	

*Note 1.* Each response above was prefaced with the stem "In this situation, how likely do you think mothers are to:" See Appendix C for full survey.

*Note 2.* Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

*Note 3.* \* indicates significance at  $p < .05$

Table E19

*Hypothesis 5a: Differences in Reports of Other Parents' Sideline Behavior Between High and Low Stakes Situations of Athlete Unsportsmanlike Behavior (Baseball, Fathers Only)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the field	1.68	.777	1.78	.855	151	-1.793	.075	
Act in a way that is embarrassing	1.55	.735	1.72	.857	151	-3.002	.003*	.01
Act like a 'bad sport'	1.50	.701	1.69	.873	150	-3.579	.000*	.01
Yell at the umpire	1.55	.762	1.68	.835	151	-2.253	.026*	.01
Yell at the coach(es)	1.49	.690	1.59	.801	151	-1.853	.066	
Verbally 'get into it'	1.42	.647	1.50	.738	150	-1.579	.116	
Physically 'get into it'	1.16	.421	1.22	.503	152	-2.087	.039*	.01
'Coach' from the sidelines	2.43	.916	2.47	1.070	152	-.576	.565	
Encourage athletes to 'play rough'	1.31	.601	1.33	.616	152	-.288	.774	
Encourage athletes to play outside the rules	1.20	.433	1.32	.606	149	-3.400	.001*	.01
Cheer for good play for both teams	3.77	1.045	3.69	1.087	151	1.178	.241	
Cheer for athlete effort	3.87	1.035	3.88	1.052	150	-.108	.914	
Use profanity loud enough for athletes to hear	1.56	.746	1.59	.787	149	-.576	.565	
Distract athletes from focusing on the game	1.54	.731	1.55	.766	148	-.301	.764	
Sit or stand silently and clap only when an athlete (or the team) does something good	2.83	1.214	2.80	1.249	147	.326	.745	
Yell something offensive to, or about, someone	1.55	.757	1.57	.791	148	-.383	.702	

*Note 1.* Each response above was prefaced with the stem "In this situation, how likely do you think fathers are to:" See Appendix C for full survey.

*Note 2.* Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

*Note 3.* \* indicates significance at  $p < .05$

Table E20

*Hypothesis 5a: Differences in Reports of Other Parents' Sideline Behavior Between High and Low Stakes Situations of Parent Unsportsmanlike Behavior (Baseball, Mothers Only)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the field	1.66	.753	1.65	.815	147	.118	.906	
Act in a way that is embarrassing	1.70	.746	1.77	.803	145	-1.240	.217	
Act like a 'bad sport'	1.71	.787	1.76	.799	146	-.777	.439	
Yell at the umpire	1.49	.675	1.57	.775	147	-1.765	.080	
Yell at the coach(es)	1.51	.655	1.57	.748	147	-1.289	.200	
Verbally 'get into it'	1.85	.797	1.91	.875	146	-.988	.325	
Physically 'get into it'	1.20	.479	1.19	.489	145	.192	.848	
'Coach' from the sidelines	2.44	.935	2.56	1.005	147	-1.667	.098	
Encourage athletes to 'play rough'	1.37	.598	1.39	.623	147	-.332	.740	
Encourage athletes to play outside the rules	1.31	.581	1.34	.614	147	-.870	.386	
Cheer for good play for both teams	3.88	1.010	3.82	1.054	147	.627	.531	
Cheer for athlete effort	4.23	.809	4.19	.876	147	.571	.569	
Use profanity loud enough for athletes to hear	1.43	.647	1.46	.671	140	-.543	.588	
Distract athletes from focusing on the game	1.60	.729	1.57	.778	145	.491	.624	
Sit or stand silently and clap only when an athlete (or the team) does something good	2.79	1.291	2.80	1.268	145	-.075	.940	
Yell something offensive to, or about, someone	1.73	.813	1.75	.872	147	-.360	.719	

*Note 1.* Each response above was prefaced with the stem "In this situation, how likely do you think mothers are to:" See Appendix C for full survey.

*Note 2.* Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

*Note 3.* \* indicates significance at  $p < .05$

Table E21

*Hypothesis 5a: Differences in Reports of Other Parents' Sideline Behavior Between High and Low Stakes Situations of Parent Unsportsmanlike Behavior (Baseball, Fathers Only)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the field	1.85	.876	1.89	.866	147	-.687	.493	
Act in a way that is embarrassing	1.92	.840	1.93	.845	146	-.102	.919	
Act like a 'bad sport'	1.93	.845	1.98	.903	146	-.833	.406	
Yell at the umpire	1.77	.825	1.88	.892	143	-1.699	.092	
Yell at the coach(es)	1.80	.819	1.80	.819	146	.000	1.000	
Verbally 'get into it'	2.06	.878	2.01	.906	146	.777	.439	
Physically 'get into it'	1.38	.588	1.36	.639	147	.479	.633	
'Coach' from the sidelines	2.74	.977	2.72	.975	147	.272	.786	
Encourage athletes to 'play rough'	1.64	.776	1.64	.802	146	.000	1.000	
Encourage athletes to play outside the rules	1.53	.704	1.56	.731	147	-.564	.573	
Cheer for good play for both teams	3.80	.731	3.69	1.093	147	1.419	.158	
Cheer for athlete effort	4.08	.880	4.05	.909	146	.548	.585	
Use profanity loud enough for athletes to hear	1.79	.824	1.77	.853	145	.242	.809	
Distract athletes from focusing on the game	1.82	.871	1.77	.845	145	.670	.504	
Sit or stand silently and clap only when an athlete (or the team) does something good	2.83	1.133	2.74	1.208	144	1.128	.261	
Yell something offensive to, or about, someone	1.98	.897	1.97	.919	143	.206	.837	

*Note 1.* Each response above was prefaced with the stem "In this situation, how likely do you think fathers are to:" See Appendix C for full survey.

*Note 2.* Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

*Note 3.* \* indicates significance at  $p < .05$



Table E22

*Hypothesis 5a: Differences in Reports of Other Parents' Sideline Behavior Between High and Low Stakes Situations of Coach Incompetence (Baseball, Mothers Only)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the field	1.41	.625	1.61	.803	163	-4.101	.000*	.01
Act in a way that is embarrassing	1.45	.610	1.77	.860	163	-5.912	.000*	.01
Act like a 'bad sport'	1.52	.691	1.88	.842	159	-6.200	.000*	.01
Yell at the umpire	1.32	.530	1.66	.792	159	-6.549	.000*	.01
Yell at the coach(es)	1.51	.705	1.81	.848	163	-5.590	.000*	.01
Verbally 'get into it'	1.37	.586	1.65	.788	163	-5.464	.000*	.01
Physically 'get into it'	1.14	.345	1.19	.450	163	-1.901	.059	
'Coach' from the sidelines	2.18	.955	2.50	.965	162	-4.603	.000*	.01
Encourage athletes to 'play rough'	1.23	.504	1.41	.682	162	-4.015	.000*	.01
Encourage athletes to play outside the rules	1.25	.522	1.41	.682	162	-3.580	.000*	.01
Cheer for good play for both teams	4.03	.878	3.80	1.024	162	3.642	.000*	.01
Cheer for athlete effort	4.18	.823	4.17	.833	163	.232	.817	
Use profanity loud enough for athletes to hear	1.35	.564	1.47	.676	155	-3.025	.003*	.01
Distract athletes from focusing on the game	1.49	.709	1.63	.782	159	-2.764	.006*	.01
Sit or stand silently and clap only when an athlete (or the team) does something good	3.02	1.252	3.01	1.232	162	.190	.849	
Yell something offensive to, or about, someone	1.42	.618	1.66	.813	161	-4.660	.000*	.01

*Note 1.* Each response above was prefaced with the stem "In this situation, how likely do you think mothers are to:" See Appendix C for full survey.

*Note 2.* Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

*Note 3.* \* indicates significance at  $p < .05$

Table E23

*Hypothesis 5a: Differences in Reports of Other Parents' Sideline Behavior Between High and Low Stakes Situations of Coach Incompetence (Baseball, Fathers Only)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the field	1.60	.740	1.83	.963	163	-3.874	.000*	.01
Act in a way that is embarrassing	1.61	.756	1.93	.924	162	-5.422	.000*	.01
Act like a 'bad sport'	1.72	.821	2.04	.945	161	-5.274	.000*	.01
Yell at the umpire	1.55	.751	1.81	.940	159	-4.167	.000*	.01
Yell at the coach(es)	1.65	.790	2.01	.969	162	-6.078	.000*	.01
Verbally 'get into it'	1.48	.722	1.81	.897	163	-5.798	.000*	.01
Physically 'get into it'	1.24	.519	1.32	.595	162	-2.647	.009*	.01
'Coach' from the sidelines	2.55	.974	2.77	1.031	163	-3.165	.002*	.01
Encourage athletes to 'play rough'	1.42	.644	1.62	.846	163	-3.445	.001*	.01
Encourage athletes to play outside the rules	1.36	.628	1.50	.774	161	-2.763	.006*	.01
Cheer for good play for both teams	3.83	.938	3.67	1.072	162	2.798	.006*	.01
Cheer for athlete effort	4.01	.871	3.94	.941	162	1.256	.211	
Use profanity loud enough for athletes to hear	1.57	.764	1.70	.835	160	-2.572	.011*	.01
Distract athletes from focusing on the game	1.58	.730	1.76	.855	160	-3.467	.001*	.01
Sit or stand silently and clap only when an athlete (or the team) does something good	2.92	1.225	2.96	1.142	160	-.571	.569	
Yell something offensive to, or about, someone	1.56	.748	1.77	.916	161	-3.769	.000*	.01

*Note 1.* Each response above was prefaced with the stem "In this situation, how likely do you think fathers are to:" See Appendix C for full survey.

*Note 2.* Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

*Note 3.* \* indicates significance at  $p < .05$

Table E24

*Hypothesis 5a: Differences in Reports of Other Parents' Sideline Behavior Between High and Low Stakes Situations of Umpire Incompetence (Baseball, Mothers Only)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the field	1.54	.672	1.81	.892	159	-4.575	.000*	.01
Act in a way that is embarrassing	1.73	.763	2.11	.944	157	-6.429	.000*	.01
Act like a 'bad sport'	1.83	.849	2.17	.946	156	-5.661	.000*	.01
Yell at the umpire	2.12	.860	2.48	.999	158	-5.906	.000*	.01
Yell at the coach(es)	1.45	.614	1.66	.789	156	-4.244	.000*	.01
Verbally 'get into it'	1.45	.673	1.73	.819	157	-4.793	.000*	.01
Physically 'get into it'	1.13	.334	1.23	.494	157	-3.035	.003*	.01
'Coach' from the sidelines	2.09	.980	2.36	1.024	159	-3.922	.000*	.01
Encourage athletes to 'play rough'	1.33	.601	1.45	.700	158	-2.630	.009*	.01
Encourage athletes to play outside the rules	1.24	.511	1.38	.655	156	-2.898	.004*	.01
Cheer for good play for both teams	3.75	1.048	3.71	1.099	158	.537	.592	
Cheer for athlete effort	4.11	.792	4.01	.921	158	1.257	.211	
Use profanity loud enough for athletes to hear	1.42	.620	1.67	.761	157	-4.770	.000*	.01
Distract athletes from focusing on the game	1.37	.613	1.53	.711	157	-3.713	.000*	.01
Sit or stand silently and clap only when an athlete (or the team) does something good	2.96	1.238	2.96	1.210	157	-.069	.945	
Yell something offensive to, or about, someone	1.64	.790	1.79	.845	158	-2.274	.024*	.01

*Note 1.* Each response above was prefaced with the stem "In this situation, how likely do you think mothers are to:" See Appendix C for full survey.

*Note 2.* Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

*Note 3.* \* indicates significance at  $p < .05$

Table E25

*Hypothesis 5a: Differences in Reports of Other Parents' Sideline Behavior Between High and Low Stakes Situations of Umpire Incompetence (Baseball, Fathers Only)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the field	1.74	.805	2.06	.998	159	-5.223	.000*	.01
Act in a way that is embarrassing	1.89	.847	2.24	.943	159	-5.607	.000*	.01
Act like a 'bad sport'	1.96	.878	2.30	.940	158	-6.031	.000*	.01
Yell at the umpire	2.33	.952	2.65	.981	158	-5.592	.000*	.01
Yell at the coach(es)	1.67	.800	1.97	.957	158	-5.020	.000*	.01
Verbally 'get into it'	1.67	.807	1.97	.893	159	-4.946	.000*	.01
Physically 'get into it'	1.23	.465	1.36	.608	159	-3.445	.001*	.01
'Coach' from the sidelines	2.44	1.038	2.64	1.090	159	-2.917	.004*	.01
Encourage athletes to 'play rough'	1.50	.739	1.64	.848	156	-2.642	.009*	.01
Encourage athletes to play outside the rules	1.41	.670	1.49	.756	156	-1.642	.103	
Cheer for good play for both teams	3.66	1.057	3.61	1.128	157	.661	.510	
Cheer for athlete effort	3.93	.928	3.96	.929	156	-.347	.729	
Use profanity loud enough for athletes to hear	1.76	.837	1.99	.908	159	-4.062	.000*	.01
Distract athletes from focusing on the game	1.58	.732	1.69	.826	158	-2.521	.013*	.01
Sit or stand silently and clap only when an athlete (or the team) does something good	2.89	1.144	3.01	1.163	159	-1.425	.156	
Yell something offensive to, or about, someone	1.78	.919	2.06	.979	158	-3.930	.000*	.01

*Note 1.* Each response above was prefaced with the stem "In this situation, how likely do you think fathers are to:" See Appendix C for full survey.

*Note 2.* Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

*Note 3.* \* indicates significance at  $p < .05$

Table E26

*Hypothesis 5a: Differences in Reports of Other Parents' Sideline Behavior Between High and Low Stakes Situations of Athlete Unsportsmanlike Behavior (Ice Hockey, Mothers Only)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the ice	2.77	.920	2.73	1.122	102	.415	.679	
Act in a way that is embarrassing	2.42	.880	2.50	.989	102	-.833	.407	
Act like a 'bad sport'	2.30	.906	2.42	.995	102	-1.314	.192	
Yell at the referee	2.85	.849	2.86	1.072	101	-.112	.911	
Yell at the coach(es)	1.86	.919	2.17	.940	102	-3.373	.001*	.32
Verbally 'get into it'	1.79	.894	2.05	.927	101	-3.303	.001*	.31
Physically 'get into it'	1.26	.484	1.34	.552	102	-1.580	.117	
'Coach' from the sidelines	2.32	1.050	2.59	1.070	102	-2.899	.005*	.28
Encourage athletes to 'play rough'	2.03	1.000	1.97	1.000	101	.726	.470	
Encourage athletes to play outside the rules	1.61	.858	1.64	.899	101	-.467	.642	
Cheer for good play for both teams	3.54	1.279	3.45	1.248	101	.791	.431	
Cheer for athlete effort	3.69	1.205	3.75	1.186	102	-.565	.573	
Use profanity loud enough for athletes to hear	1.81	.829	1.85	.905	101	-.542	.589	
Distract athletes from focusing on the game	1.85	.861	1.80	.879	101	.672	.503	
Sit or stand silently and clap only when an athlete (or the team) does something good	3.06	1.115	3.01	1.067	101	.388	.699	
Yell something offensive to, or about, someone	2.11	.937	2.03	.953	100	.872	.385	

*Note 1.* Each response above was prefaced with the stem "In this situation, how likely do you think mothers are to:" See Appendix D for full survey.

*Note 2.* Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

*Note 3.* \* indicates significance at  $p < .05$

Table E27

*Hypothesis 5a: Differences in Reports of Other Parents' Sideline Behavior Between High and Low Stakes Situations of Athlete Unsportsmanlike Behavior (Ice Hockey, Fathers Only)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the ice	2.81	.852	2.74	1.048	102	.867	.388	
Act in a way that is embarrassing	2.46	.804	2.48	.909	101	-.249	.804	
Act like a 'bad sport'	2.43	.862	2.50	.931	101	-.867	.388	
Yell at the referee	2.95	.821	2.95	1.042	102	.000	1.000	
Yell at the coach(es)	2.21	.958	2.25	1.009	101	-.506	.614	
Verbally 'get into it'	1.99	.854	2.10	.922	100	-1.415	.160	
Physically 'get into it'	1.41	.601	1.51	.712	102	-2.004	.048*	.19
'Coach' from the sidelines	2.72	.969	2.85	1.103	101	-1.714	.090	
Encourage athletes to 'play rough'	2.25	.987	2.22	1.120	102	.355	.724	
Encourage athletes to play outside the rules	1.86	.970	1.84	1.017	100	.235	.815	
Cheer for good play for both teams	3.39	1.157	3.33	1.175	102	.645	.520	
Cheer for athlete effort	3.61	1.087	3.57	1.108	102	.483	.630	
Use profanity loud enough for athletes to hear	2.03	.928	2.13	.992	101	-1.318	.191	
Distract athletes from focusing on the game	1.98	.894	2.09	.960	100	-1.440	.153	
Sit or stand silently and clap only when an athlete (or the team) does something good	3.05	1.023	3.03	1.034	100	.215	.830	
Yell something offensive to, or about, someone	2.21	.926	2.22	1.011	101	-.120	.905	

*Note 1.* Each response above was prefaced with the stem "In this situation, how likely do you think fathers are to:" See Appendix D for full survey.

*Note 2.* Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

*Note 3.* \* indicates significance at  $p < .05$

Table E28

*Hypothesis 5a: Differences in Reports of Other Parents' Sideline Behavior Between High and Low Stakes Situations of Parent Unsportsmanlike Behavior (Ice Hockey, Mothers Only)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the ice	1.96	.845	2.14	.890	95	-2.901	.005*	.29
Act in a way that is embarrassing	2.07	.807	2.28	.787	96	-3.322	.001*	.32
Act like a 'bad sport'	2.17	.879	2.20	.829	95	-.445	.657	
Yell at the referee	1.90	.848	2.22	.869	96	-3.883	.000*	.37
Yell at the coach(es)	1.75	.778	1.97	.871	96	-2.831	.006*	.28
Verbally 'get into it'	2.35	.913	2.26	.881	96	1.195	.235	
Physically 'get into it'	1.40	.640	1.45	.663	95	-.928	.356	
'Coach' from the sidelines	2.26	1.034	2.51	1.052	96	-2.894	.005*	.28
Encourage athletes to 'play rough'	1.87	.874	1.95	.834	96	-1.070	.287	
Encourage athletes to play outside the rules	1.64	.783	1.71	.807	95	-1.122	.265	
Cheer for good play for both teams	3.51	1.114	3.43	1.158	95	.929	.355	
Cheer for athlete effort	3.93	.954	3.90	.968	95	.340	.734	
Use profanity loud enough for athletes to hear	1.75	.821	1.86	.829	95	-2.157	.034*	.22
Distract athletes from focusing on the game	1.79	.901	1.82	.854	96	-.427	.671	
Sit or stand silently and clap only when an athlete (or the team) does something good	3.26	1.098	3.11	1.035	95	1.619	.109	
Yell something offensive to, or about, someone	2.18	.984	2.09	.859	95	.985	.327	

*Note 1.* Each response above was prefaced with the stem "In this situation, how likely do you think mothers are to:" See Appendix D for full survey.

*Note 2.* Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

*Note 3.* \* indicates significance at  $p < .05$

Table E29

*Hypothesis 5a: Differences in Reports of Other Parents' Sideline Behavior Between High and Low Stakes Situations of Parent Unsportsmanlike Behavior (Ice Hockey, Fathers Only)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the ice	2.21	.935	2.38	.906	96	-2.301	.024*	.23
Act in a way that is embarrassing	2.28	.887	2.39	.836	96	-1.736	.086	
Act like a 'bad sport'	2.29	.889	2.40	.850	96	-1.884	.063	
Yell at the referee	2.21	.901	2.48	.925	96	-3.898	.000*	.37
Yell at the coach(es)	1.98	.882	2.11	.905	95	-2.178	.032*	.22
Verbally 'get into it'	2.47	.885	2.45	.920	94	.249	.804	
Physically 'get into it'	1.67	.774	1.68	.771	96	-.199	.843	
'Coach' from the sidelines	2.58	.974	2.75	1.062	94	-2.419	.018*	.24
Encourage athletes to 'play rough'	2.15	.906	2.07	.874	95	1.122	.265	
Encourage athletes to play outside the rules	1.78	.857	1.81	.821	96	-.598	.551	
Cheer for good play for both teams	3.28	1.152	3.36	1.165	96	-.929	.355	
Cheer for athlete effort	3.60	1.056	3.81	.971	94	-2.256	.026*	.23
Use profanity loud enough for athletes to hear	2.11	.888	2.06	.864	96	.728	.469	
Distract athletes from focusing on the game	2.03	.869	2.02	.899	94	.168	.867	
Sit or stand silently and clap only when an athlete (or the team) does something good	3.13	1.039	3.02	1.066	95	.944	.347	
Yell something offensive to, or about, someone	2.34	.877	2.29	.901	96	.761	.449	

*Note 1.* Each response above was prefaced with the stem "In this situation, how likely do you think fathers are to:" See Appendix D for full survey.

*Note 2.* Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

*Note 3.* \* indicates significance at  $p < .05$



Table E30

*Hypothesis 5a: Differences in Reports of Other Parents' Sideline Behavior Between High and Low Stakes Situations of Coach Incompetence (Ice Hockey, Mothers Only)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the ice	1.36	.556	1.97	.939	103	-7.923	.000*	.62
Act in a way that is embarrassing	1.34	.551	2.11	.934	103	-9.916	.000*	.70
Act like a 'bad sport'	1.36	.558	2.18	.916	102	-10.669	.000*	.73
Yell at the referee	1.35	.574	2.23	.953	101	-10.203	.000*	.71
Yell at the coach(es)	1.33	.584	1.92	.915	102	-7.314	.000*	.59
Verbally 'get into it'	1.26	.504	1.79	.824	102	-6.734	.000*	.55
Physically 'get into it'	1.16	.390	1.24	.514	102	-1.900	.060	
'Coach' from the sidelines	1.96	.934	2.75	1.040	103	-7.876	.000*	.61
Encourage athletes to 'play rough'	1.23	.447	1.79	.859	102	-6.906	.000*	.56
Encourage athletes to play outside the rules	1.17	.402	1.46	.671	100	-4.417	.000*	.40
Cheer for good play for both teams	4.00	1.034	3.51	1.249	101	5.092	.000*	.45
Cheer for athlete effort	4.12	1.013	4.20	.933	102	-1.054	.294	
Use profanity loud enough for athletes to hear	1.19	.421	1.61	.795	102	-5.665	.000*	.49
Distract athletes from focusing on the game	1.27	.507	1.60	.830	103	-4.653	.000*	.42
Sit or stand silently and clap only when an athlete (or the team) does something good	3.21	1.297	2.88	1.177	103	2.719	.008*	.26
Yell something offensive to, or about, someone	1.33	.717	1.81	.936	103	-4.469	.000*	.40

*Note 1.* Each response above was prefaced with the stem "In this situation, how likely do you think mothers are to:" See Appendix D for full survey.

*Note 2.* Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

*Note 3.* \* indicates significance at  $p < .05$

Table E31

*Hypothesis 5a: Differences in Reports of Other Parents' Sideline Behavior Between High and Low Stakes Situations of Coach Incompetence (Ice Hockey, Fathers Only)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the ice	1.53	.710	2.30	.944	103	-8.465	.000*	.64
Act in a way that is embarrassing	1.47	.710	2.27	.968	103	-9.191	.000*	.67
Act like a 'bad sport'	1.47	.699	2.32	.935	101	-10.289	.000*	.72
Yell at the referee	1.51	.752	2.37	.970	102	-9.399	.000*	.68
Yell at the coach(es)	1.50	.714	2.16	.992	101	-7.699	.000*	.61
Verbally 'get into it'	1.33	.549	1.92	.871	102	-7.423	.000*	.59
Physically 'get into it'	1.18	.413	1.37	.624	103	-3.480	.001*	.32
'Coach' from the sidelines	2.23	1.012	3.08	1.118	102	-7.383	.000*	.59
Encourage athletes to 'play rough'	1.42	.650	2.11	.979	102	-7.285	.000*	.59
Encourage athletes to play outside the rules	1.28	.511	1.63	.801	103	-5.216	.000*	.46
Cheer for good play for both teams	3.79	1.021	3.38	1.233	103	4.959	.000*	.44
Cheer for athlete effort	4.01	.939	3.99	.917	101	.282	.779	
Use profanity loud enough for athletes to hear	1.38	.628	1.88	.867	102	-5.946	.000*	.51
Distract athletes from focusing on the game	1.38	.628	1.81	.875	102	-5.597	.000*	.48
Sit or stand silently and clap only when an athlete (or the team) does something good	3.12	1.287	2.97	1.153	103	1.192	.236	
Yell something offensive to, or about, someone	1.43	.682	2.01	.960	101	-6.373	.000*	.54

*Note 1.* Each response above was prefaced with the stem "In this situation, how likely do you think fathers are to:" See Appendix D for full survey.

*Note 2.* Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

*Note 3.* \* indicates significance at  $p < .05$

Table E32

*Hypothesis 5a: Differences in Reports of Other Parents' Sideline Behavior Between High and Low Stakes Situations of Referee Incompetence (Ice Hockey, Mothers Only)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the ice	1.95	.923	2.36	1.051	110	-4.969	.000*	.43
Act in a way that is embarrassing	1.98	.933	2.43	1.013	108	-5.710	.000*	.48
Act like a 'bad sport'	2.08	.887	2.47	1.000	107	-5.505	.000*	.47
Yell at the referee	2.50	.999	2.87	1.080	110	-4.614	.000*	.40
Yell at the coach(es)	1.64	.739	1.97	.943	109	-4.898	.000*	.42
Verbally 'get into it'	1.62	.717	2.01	.943	109	-5.428	.000*	.46
Physically 'get into it'	1.18	.473	1.26	.536	109	-2.096	.038*	.20
'Coach' from the sidelines	2.23	1.020	2.36	1.155	109	-1.369	.174	
Encourage athletes to 'play rough'	1.53	.711	1.79	.926	110	-4.192	.000*	.37
Encourage athletes to play outside the rules	1.35	.598	1.66	.889	110	-5.249	.000*	.45
Cheer for good play for both teams	3.51	1.111	3.31	1.204	110	2.142	.034*	.20
Cheer for athlete effort	3.83	.966	3.83	1.088	109	.220	.826	
Use profanity loud enough for athletes to hear	1.61	.719	1.95	.907	108	-4.737	.000*	.41
Distract athletes from focusing on the game	1.68	.741	1.87	.879	109	-2.722	.008*	.25
Sit or stand silently and clap only when an athlete (or the team) does something good	3.14	1.101	2.94	1.087	108	2.123	.036*	.20
Yell something offensive to, or about, someone	1.89	.932	2.23	1.037	109	-4.324	.000*	.38

*Note 1.* Each response above was prefaced with the stem "In this situation, how likely do you think mothers are to:" See Appendix D for full survey.

*Note 2.* Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

*Note 3.* \* indicates significance at  $p < .05$

Table E33

*Hypothesis 5a: Differences in Reports of Other Parents' Sideline Behavior Between High and Low Stakes Situations of Referee Incompetence (Ice Hockey, Fathers Only)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the ice	2.18	.907	2.50	1.069	110	-4.102	.000*	.36
Act in a way that is embarrassing	2.12	.882	2.53	.952	110	-6.294	.000*	.51
Act like a 'bad sport'	2.19	.900	2.53	.971	110	-4.368	.000*	.38
Yell at the referee	2.59	.929	3.01	.977	110	-5.799	.000*	.48
Yell at the coach(es)	1.81	.815	2.15	.955	110	-4.554	.000*	.40
Verbally 'get into it'	1.77	.750	2.09	.977	110	-4.336	.000*	.38
Physically 'get into it'	1.29	.562	1.51	.699	110	-3.966	.000*	.35
'Coach' from the sidelines	2.49	.974	2.71	1.136	109	-2.595	.011*	.24
Encourage athletes to 'play rough'	1.82	.865	2.06	1.038	110	-3.402	.001*	.31
Encourage athletes to play outside the rules	1.54	.784	1.77	.914	110	-3.966	.000*	.35
Cheer for good play for both teams	3.43	1.050	3.40	1.056	110	.533	.595	
Cheer for athlete effort	3.72	.953	3.77	1.006	108	-.904	.368	
Use profanity loud enough for athletes to hear	1.91	.848	2.14	1.031	110	-3.345	.001*	.30
Distract athletes from focusing on the game	1.85	.844	2.06	.960	109	-2.858	.005*	.26
Sit or stand silently and clap only when an athlete (or the team) does something good	2.98	1.136	2.90	1.103	110	.965	.337	
Yell something offensive to, or about, someone	2.07	.950	2.33	1.098	108	-3.140	.002*	.29

*Note 1.* Each response above was prefaced with the stem "In this situation, how likely do you think fathers are to:" See Appendix D for full survey.

*Note 2.* Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

*Note 3.* \* indicates significance at  $p < .05$

Table E34

*Hypothesis 5b: Differences in Report of Own Behavior in Low and High Stakes Situations of Athlete Unsportsmanlike Conduct (Baseball)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the field	1.09	.363	1.11	.337	151	-.783	.435	
Act in a way that is embarrassing	1.07	.248	1.12	.362	152	-2.020	.045*	.01
Act like a 'bad sport'	1.03	.161	1.09	.304	150	-2.541	.012*	.02
Yell at the umpire	1.03	.178	1.10	.307	152	-2.723	.007*	.02
Yell at the coach(es)	1.02	.181	1.05	.210	151	-1.267	.207	
Verbally 'get into it'	1.01	.081	1.07	.273	152	-2.540	.012*	.02
Physically 'get into it'	1.00	.000	1.00	.000	-	-	-	
'Coach' from the sidelines	1.81	.978	1.89	1.036	152	-1.282	.202	
Encourage athletes to 'play rough'	1.03	.198	1.03	.179	151	-.377	.707	
Encourage athletes to play outside the rules	1.00	.000	1.02	.140	151	-1.744	.083	
Cheer for good play for both teams	4.12	1.042	4.09	1.061	151	.523	.602	
Cheer for athlete effort	4.23	1.014	4.19	1.063	150	.661	.510	
Use profanity loud enough for athletes to hear	1.06	.265	1.07	.250	149	-.242	.809	
Distract athletes from focusing on the game	1.11	.349	1.14	.401	150	-1.294	.198	
Sit or stand silently and clap only when an athlete (or the team) does something good	2.76	1.340	2.78	1.346	150	-.234	.815	
Yell something offensive to, or about, someone	1.07	.358	1.08	.316	151	-.470	.639	

*Note 1.* Each response above was prefaced with the stem "In this situation, how likely are you to:" See Appendix C for full survey.

*Note 2.* Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

*Note 3.* \* indicates significance at  $p < .05$

Table E35

*Hypothesis 5b: Differences in Report of Own Behavior in Low and High Stakes Situations of Parent Unsportsmanlike Conduct (Baseball)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the field	1.04	.198	1.08	.320	147	-1.744	.083	
Act in a way that is embarrassing	1.12	.368	1.14	.399	146	-.470	.639	
Act like a 'bad sport'	1.05	.243	1.11	.360	147	-2.962	.004*	.02
Yell at the umpire	1.10	.325	1.15	.410	147	-1.709	.090	
Yell at the coach(es)	1.07	.289	1.09	.329	146	-1.000	.319	
Verbally 'get into it'	1.29	.561	1.25	.547	146	.870	.386	
Physically 'get into it'	1.00	.000	1.00	.000	-	-	-	
'Coach' from the sidelines	2.26	1.145	2.23	1.137	147	.592	.555	
Encourage athletes to 'play rough'	1.05	.255	1.05	.255	147	.000	1.000	
Encourage athletes to play outside the rules	1.03	.216	1.04	.230	146	-1.000	.319	
Cheer for good play for both teams	4.34	.813	4.25	.932	147	1.550	.123	
Cheer for athlete effort	4.59	.648	4.54	.694	147	1.089	.278	
Use profanity loud enough for athletes to hear	1.12	.321	1.12	.342	146	.000	1.000	
Distract athletes from focusing on the game	1.18	.468	1.16	.421	143	.726	.469	
Sit or stand silently and clap only when an athlete (or the team) does something good	2.62	1.376	2.56	1.344	145	.917	.361	
Yell something offensive to, or about, someone	1.18	.492	1.19	.501	146	-.342	.733	

*Note 1.* Each response above was prefaced with the stem "In this situation, how likely are you to:" See Appendix C for full survey.

*Note 2.* Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

*Note 3.* \* indicates significance at  $p < .05$

Table E36

*Hypothesis 5b: Differences in Report of Own Behavior in Low and High Stakes Situations of Coach Incompetence (Baseball)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the field	1.04	.232	1.12	.376	161	-3.077	.002*	.02
Act in a way that is embarrassing	1.08	.350	1.16	.419	163	-2.923	.004*	.02
Act like a 'bad sport'	1.08	.334	1.23	.480	161	-4.784	.000*	.03
Yell at the umpire	1.10	.326	1.20	.456	162	-3.216	.002*	.02
Yell at the coach(es)	1.04	.258	1.14	.378	161	-3.563	.000*	.02
Verbally 'get into it'	1.04	.219	1.11	.314	162	-3.303	.001*	.02
Physically 'get into it'	1.01	.079	1.01	.111	160	-.576	.565	
'Coach' from the sidelines	1.93	.930	2.12	.987	161	-3.351	.001*	.02
Encourage athletes to 'play rough'	1.06	.380	1.10	.318	162	-1.135	.258	
Encourage athletes to play outside the rules	1.02	.136	1.05	.218	160	-1.905	.059	
Cheer for good play for both teams	4.31	.850	4.09	1.015	162	3.607	.000*	.02
Cheer for athlete effort	4.43	.822	4.34	.916	163	1.516	.132	
Use profanity loud enough for athletes to hear	1.08	.293	1.15	.388	163	-3.423	.001*	.02
Distract athletes from focusing on the game	1.09	.334	1.19	.443	158	-3.230	.002*	.02
Sit or stand silently and clap only when an athlete (or the team) does something good	2.96	1.387	3.00	1.315	162	-.513	.608	
Yell something offensive to, or about, someone	1.04	.256	1.11	.368	163	-3.132	.002*	.02

Note 1. Each response above was prefaced with the stem "In this situation, how likely are you to:" See Appendix C for full survey.

Note 2. Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

Note 3. \* indicates significance at  $p < .05$

Table E37

*Hypothesis 5b: Differences in Report of Own Behavior in Low and High Stakes Situations of Umpire Incompetence (Baseball)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the field	1.06	.257	1.18	.456	159	-3.663	.000*	.02
Act in a way that is embarrassing	1.13	.393	1.28	.540	157	-4.075	.000*	.02
Act like a 'bad sport'	1.17	.409	1.36	.619	158	-4.830	.000*	.03
Yell at the umpire	1.31	.575	1.60	.797	158	-5.778	.000*	.03
Yell at the coach(es)	1.08	.288	1.13	.423	158	-2.209	.029*	.01
Verbally 'get into it'	1.11	.374	1.16	.435	157	-1.901	.059	
Physically 'get into it'	1.01	.080	1.03	.238	156	-1.267	.207	
'Coach' from the sidelines	1.81	.949	1.92	1.037	158	-1.737	.084	
Encourage athletes to 'play rough'	1.06	.257	1.08	.328	159	-.831	.407	
Encourage athletes to play outside the rules	1.06	.416	1.05	.271	158	.315	.753	
Cheer for good play for both teams	4.21	.879	4.18	.968	159	.661	.509	
Cheer for athlete effort	4.48	.694	4.45	.746	156	.629	.530	
Use profanity loud enough for athletes to hear	1.13	.350	1.19	.482	159	-2.227	.027*	.01
Distract athletes from focusing on the game	1.10	.340	1.18	.456	159	-2.893	.004*	.02
Sit or stand silently and clap only when an athlete (or the team) does something good	2.85	1.437	2.93	1.383	159	-.945	.346	
Yell something offensive to, or about, someone	1.13	.402	1.18	.538	158	-1.288	.199	

Note 1. Each response above was prefaced with the stem "In this situation, how likely are you to:" See Appendix C for full survey.

Note 2. Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

Note 3. \* indicates significance at  $p < .05$



Table E38

*Hypothesis 5b: Differences in Report of Own Behavior in Low and High Stakes Situations of Athlete Unsportsmanlike Conduct (Ice Hockey)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the ice	1.48	.639	1.61	.819	102	-2.200	.030*	.21
Act in a way that is embarrassing	1.30	.539	1.37	.657	102	-1.468	.145	
Act like a 'bad sport'	1.20	.448	1.27	.546	100	-1.538	.127	
Yell at the referee	1.62	.784	1.71	.897	101	-1.318	.191	
Yell at the coach(es)	1.14	.468	1.18	.454	101	-.942	.348	
Verbally 'get into it'	1.10	.456	1.10	.359	101	.000	1.000	
Physically 'get into it'	1.01	.099	1.02	.198	101	-1.000	.320	
'Coach' from the sidelines	1.67	.912	1.76	.934	102	-1.101	.274	
Encourage athletes to 'play rough'	1.19	.611	1.16	.500	102	1.269	.207	
Encourage athletes to play outside the rules	1.05	.257	1.04	.239	102	.575	.566	
Cheer for good play for both teams	4.05	1.075	4.05	1.038	101	.000	1.000	
Cheer for athlete effort	4.17	1.043	4.24	1.014	102	-1.044	.299	
Use profanity loud enough for athletes to hear	1.17	.513	1.14	.397	102	1.157	.250	
Distract athletes from focusing on the game	1.17	.466	1.17	.466	102	.000	1.000	
Sit or stand silently and clap only when an athlete (or the team) does something good	3.22	1.220	3.25	1.242	102	-.238	.812	
Yell something offensive to, or about, someone	1.20	.581	1.21	.603	101	-.241	.810	

*Note 1.* Each response above was prefaced with the stem "In this situation, how likely are you to:" See Appendix D for full survey.

*Note 2.* Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

*Note 3.* \* indicates significance at  $p < .05$

Table E39

*Hypothesis 5b: Differences in Report of Own Behavior in Low and High Stakes Situations of Parent Unsportsmanlike Conduct (Ice Hockey)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the ice	1.16	.419	1.16	.443	95	.000	1.000	
Act in a way that is embarrassing	1.22	.462	1.23	.468	96	-2.57	.798	
Act like a 'bad sport'	1.20	.424	1.19	.464	96	.276	.783	
Yell at the referee	1.25	.541	1.31	.601	96	-1.510	.134	
Yell at the coach(es)	1.07	.297	1.10	.368	96	-.773	.441	
Verbally 'get into it'	1.38	.620	1.29	.520	96	2.227	.028*	.22
Physically 'get into it'	1.02	.144	1.01	.102	95	1.000	.320	
'Coach' from the sidelines	1.64	.844	1.72	.898	96	-1.522	.131	
Encourage athletes to 'play rough'	1.12	.331	1.15	.486	96	-.831	.408	
Encourage athletes to play outside the rules	1.02	.144	1.06	.283	95	-1.648	.103	
Cheer for good play for both teams	3.92	.986	3.85	1.064	96	.980	.330	
Cheer for athlete effort	4.30	.819	4.32	.873	96	-.332	.741	
Use profanity loud enough for athletes to hear	1.08	.277	1.11	.319	96	-1.000	.320	
Distract athletes from focusing on the game	1.14	.346	1.13	.364	94	.445	.657	
Sit or stand silently and clap only when an athlete (or the team) does something good	3.32	1.302	3.05	1.348	95	2.478	.015*	.25
Yell something offensive to, or about, someone	1.22	.563	1.21	.519	96	.207	.836	

*Note 1.* Each response above was prefaced with the stem "In this situation, how likely are you to:" See Appendix D for full survey.

*Note 2.* Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

*Note 3.* \* indicates significance at  $p < .05$

Table E40

*Hypothesis 5b: Differences in Report of Own Behavior in Low and High Stakes Situations of Coach Incompetence (Ice Hockey)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the ice	1.04	.193	1.13	.419	103	-2.756	.007*	.26
Act in a way that is embarrassing	1.03	.168	1.22	.502	103	-4.229	.000*	.38
Act like a 'bad sport'	1.03	.169	1.17	.422	102	-3.472	.001*	.33
Yell at the referee	1.07	.289	1.36	.624	102	-5.339	.000*	.47
Yell at the coach(es)	1.03	.168	1.12	.350	103	-2.802	.006*	.27
Verbally 'get into it'	1.03	.170	1.11	.342	101	-2.600	.011*	.25
Physically 'get into it' <sup>a</sup>	1.01	.098	1.01	.098	-	-	-	
'Coach' from the sidelines	1.57	.890	1.99	1.119	103	-5.780	.000*	.49
Encourage athletes to 'play rough'	1.09	.318	1.20	.546	101	-2.344	.021*	.23
Encourage athletes to play outside the rules	1.00	.000	1.05	.257	102	-1.914	.058	
Cheer for good play for both teams	4.25	1.050	3.91	1.142	103	3.865	.000*	.36
Cheer for athlete effort	4.48	.927	4.49	.815	102	0.134	.894	
Use profanity loud enough for athletes to hear	1.04	.193	1.11	.367	103	-2.147	.034*	.21
Distract athletes from focusing on the game	1.05	.216	1.10	.329	102	-2.281	.025*	.22
Sit or stand silently and clap only when an athlete (or the team) does something good	3.03	1.579	2.89	1.434	103	1.010	.315	
Yell something offensive to, or about, someone	1.06	.273	1.12	.402	103	-1.421	.158	

Note 1. Each response above was prefaced with the stem "In this situation, how likely are you to:" See Appendix D for full survey.

Note 2. Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

Note 3. \* indicates significance at  $p < .05$

Note 4. <sup>a</sup> indicates the t statistic cannot be computed because the standard error of the difference is 0

Table E41

*Hypothesis 5b: Differences in Report of Own Behavior in Low and High Stakes Situations of Referee Incompetence (Ice Hockey)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the ice	1.11	.367	1.25	.532	109	-3.591	.000*	.33
Act in a way that is embarrassing	1.15	.409	1.28	.590	110	-2.956	.004*	.27
Act like a 'bad sport'	1.17	.424	1.36	.658	110	-4.021	.000*	.36
Yell at the referee	1.45	.684	1.67	.908	110	-3.492	.001*	.32
Yell at the coach(es)	1.06	.280	1.15	.446	109	-2.096	.038*	.20
Verbally 'get into it'	1.04	.234	1.09	.350	107	-1.921	.057	
Physically 'get into it'	1.02	.191	1.03	.212	109	-1.000	.320	
'Coach' from the sidelines	1.57	.816	1.75	.958	110	-2.605	.010*	.24
Encourage athletes to 'play rough'	1.09	.345	1.16	.458	110	-2.356	.020*	.22
Encourage athletes to play outside the rules	1.06	.299	1.08	.363	108	-1.000	.320	
Cheer for good play for both teams	4.14	.913	3.87	1.037	110	3.474	.001*	.31
Cheer for athlete effort	4.34	.847	4.26	.941	110	1.069	.288	
Use profanity loud enough for athletes to hear	1.11	.366	1.20	.519	110	-2.167	.032*	.20
Distract athletes from focusing on the game	1.11	.369	1.17	.448	108	-1.713	.090	
Sit or stand silently and clap only when an athlete (or the team) does something good	3.37	1.328	3.15	1.237	110	2.625	.010*	.24
Yell something offensive to, or about, someone	1.18	.606	1.21	.524	110	-.436	.664	

Note 1. Each response above was prefaced with the stem "In this situation, how likely are you to:" See Appendix D for full survey.

Note 2. Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

Note 3. \* indicates significance at  $p < .05$

Table E42

*Hypothesis 5c: Differences in Acceptability of Mothers' Sideline Behavior Between Low and High Stakes Situations of Athlete Unsportsmanlike Conduct (Baseball)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the field	1.02	.139	1.05	.239	152	-1.419	.158	
Act in a way that is embarrassing	1.03	.178	1.03	.178	152	.000	1.000	
Act like a 'bad sport'	1.00	.000	1.01	.115	149	-1.419	.158	
Yell at the umpire	1.02	.140	1.02	.140	-	-	-	
Yell at the coach(es)	1.01	.081	1.01	.081	-	-	-	
Verbally 'get into it'	1.01	.082	1.01	.082	-	-	-	
Physically 'get into it'	1.00	.000	1.00	.000	-	-	-	
'Coach' from the sidelines	1.72	.926	1.69	.917	147	.507	.613	
Encourage athletes to 'play rough'	1.00	.000	1.00	.000	-	-	-	
Encourage athletes to play outside the rules	1.00	.000	1.00	.000	-	-	-	
Cheer for good play for both teams	4.54	1.025	4.52	.915	150	.215	.830	
Cheer for athlete effort	4.54	1.048	4.53	.927	151	.114	.910	
Use profanity loud enough for athletes to hear	1.01	.081	1.00	.000	150	1.000	.319	
Distract athletes from focusing on the game	1.06	.238	1.08	.296	149	-1.135	.258	
Sit or stand silently and clap only when an athlete (or the team) does something good	2.93	1.594	3.05	1.616	150	-1.257	.211	
Yell something offensive to, or about, someone	1.02	.181	1.01	.163	150	1.000	.319	

*Note 1.* Each response above was prefaced with the stem "In this situation, how acceptable is it for mothers to:" See Appendix C for full survey.

*Note 2.* Responses were 1 = Never appropriate, 2 = Appropriate once in a while, 3 = Sometimes appropriate, 4 = Usually appropriate, 5 = Always appropriate

*Note 3.* \* indicates significance at  $p < .05$

Table E43

*Hypothesis 5c: Differences in Acceptability of Fathers' Sideline Behavior Between Low and High Stakes Situations of Athlete Unsportsmanlike Conduct (Baseball)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the field	1.02	.139	1.03	.212	152	-.631	.529	
Act in a way that is embarrassing	1.04	.195	1.03	.213	151	.446	.656	
Act like a 'bad sport'	1.01	.163	1.01	.163	-	-	-	
Yell at the umpire	1.04	.227	1.07	.298	150	-2.020	.045*	.01
Yell at the coach(es)	1.01	.114	1.02	.140	151	-1.000	.319	
Verbally 'get into it'	1.01	.081	1.01	.114	151	-.576	.565	
Physically 'get into it'	1.00	.000	1.00	.000	-	-	-	
'Coach' from the sidelines	1.86	1.000	1.80	.941	152	1.233	.219	
Encourage athletes to 'play rough'	1.01	.082	1.01	.082	-	-	-	
Encourage athletes to play outside the rules	1.00	.000	1.00	.000	-	-	-	
Cheer for good play for both teams	4.49	1.055	4.51	.949	151	-.403	.688	
Cheer for athlete effort	4.50	1.040	4.53	.953	151	-.421	.675	
Use profanity loud enough for athletes to hear	1.02	.180	1.00	.000	152	1.345	.181	
Distract athletes from focusing on the game	1.05	.225	1.07	.262	149	-1.345	.181	
Sit or stand silently and clap only when an athlete (or the team) does something good	2.95	1.591	3.01	1.620	152	-.579	.563	
Yell something offensive to, or about, someone	1.07	.490	1.00	.000	151	1.822	.070	

*Note 1.* Each response above was prefaced with the stem "In this situation, how acceptable is it for fathers to:" See Appendix C for full survey.

*Note 2.* Responses were 1 = Never appropriate, 2 = Appropriate once in a while, 3 = Sometimes appropriate, 4 = Usually appropriate, 5 = Always appropriate

*Note 3.* \* indicates significance at  $p < .05$

Table E44

*Hypothesis 5c: Differences in Acceptability of Mothers' Sideline Behavior Between Low and High Stakes Situations of Parent Unsportsmanlike Conduct (Baseball)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the field	1.01	.116	1.01	.082	146	1.000	.319	
Act in a way that is embarrassing	1.08	.276	1.04	.199	145	2.493	.014*	.02
Act like a 'bad sport'	1.01	.117	1.01	.117	145	.000	1.000	
Yell at the umpire	1.03	.182	1.03	.201	146	.377	.707	
Yell at the coach(es)	1.01	.116	1.01	.165	146	.000	1.000	
Verbally 'get into it'	1.11	.373	1.06	.315	146	1.822	.071	
Physically 'get into it'	1.00	.000	1.00	.000	-	-	-	
'Coach' from the sidelines	1.78	.921	1.77	.983	145	.229	.819	
Encourage athletes to 'play rough'	1.01	.083	1.03	.202	144	-1.135	.258	
Encourage athletes to play outside the rules	1.02	.184	1.02	.142	146	.000	1.000	
Cheer for good play for both teams	4.66	.859	4.57	.901	145	1.155	.250	
Cheer for athlete effort	4.71	.822	4.65	.810	145	.811	.419	
Use profanity loud enough for athletes to hear	1.01	.117	1.01	.083	144	1.000	.319	
Distract athletes from focusing on the game	1.03	.164	1.05	.244	145	-1.345	.181	
Sit or stand silently and clap only when an athlete (or the team) does something good	2.96	1.615	2.90	1.645	144	.751	.454	
Yell something offensive to, or about, someone	1.07	.325	1.05	.271	145	.726	.469	

*Note 1.* Each response above was prefaced with the stem "In this situation, how acceptable is it for mothers to:" See Appendix C for full survey.

*Note 2.* Responses were 1 = Never appropriate, 2 = Appropriate once in a while, 3 = Sometimes appropriate, 4 = Usually appropriate, 5 = Always appropriate

*Note 3.* \* indicates significance at  $p < .05$

Table E45

*Hypothesis 5c: Differences in Acceptability of Fathers' Sideline Behavior Between Low and High Stakes Situations of Parent Unsportsmanlike Conduct (Baseball)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the field	1.01	.165	1.03	.201	146	-.631	.529	
Act in a way that is embarrassing	1.07	.303	1.05	.257	145	1.000	.319	
Act like a 'bad sport'	1.03	.200	1.03	.216	147	-.576	.565	
Yell at the umpire	1.05	.245	1.07	.366	144	-.831	.407	
Yell at the coach(es)	1.02	.184	1.03	.246	146	-1.419	.158	
Verbally 'get into it'	1.10	.364	1.09	.410	147	.276	.793	
Physically 'get into it'	1.00	.000	1.00	.000	-	-	-	
'Coach' from the sidelines	1.83	1.019	1.91	1.039	147	-1.390	.167	
Encourage athletes to 'play rough'	1.05	.282	1.04	.231	145	.706	.481	
Encourage athletes to play outside the rules	1.03	.201	1.03	.201	146	.000	1.000	
Cheer for good play for both teams	4.73	.624	4.59	.848	147	2.238	.027*	.01
Cheer for athlete effort	4.77	.586	4.69	.727	146	1.548	.124	
Use profanity loud enough for athletes to hear	1.02	.142	1.01	.082	146	1.419	.158	
Distract athletes from focusing on the game	1.04	.198	1.06	.267	147	-1.000	.319	
Sit or stand silently and clap only when an athlete (or the team) does something good	2.86	1.617	2.73	1.633	145	1.442	.152	
Yell something offensive to, or about, someone	1.10	.458	1.08	.446	146	.706	.481	

*Note 1.* Each response above was prefaced with the stem "In this situation, how acceptable is it for fathers to:" See Appendix C for full survey.

*Note 2.* Responses were 1 = Never appropriate, 2 = Appropriate once in a while, 3 = Sometimes appropriate, 4 = Usually appropriate, 5 = Always appropriate

*Note 3.* \* indicates significance at  $p < .05$



Table E46

*Hypothesis 5c: Differences in Acceptability of Mothers' Sideline Behavior Between Low and High Stakes Situations of Coach Incompetence (Baseball)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the field	1.01	.078	1.03	.206	162	-2.019	.045*	.01
Act in a way that is embarrassing	1.02	.135	1.02	.175	161	.000	1.000	
Act like a 'bad sport'	1.01	.158	1.04	.220	160	-2.019	.045*	.01
Yell at the umpire	1.05	.245	1.05	.245	160	.000	1.000	
Yell at the coach(es)	1.02	.175	1.03	.206	161	-1.000	.319	
Verbally 'get into it'	1.02	.135	1.04	.232	161	-2.019	.045*	.01
Physically 'get into it'	1.00	.000	1.01	.078	163	-1.000	.319	
'Coach' from the sidelines	1.67	.796	1.72	.807	161	-1.236	.218	
Encourage athletes to 'play rough'	1.02	.134	1.02	.155	163	-1.000	.319	
Encourage athletes to play outside the rules	1.01	.079	1.01	.079	-	-	-	
Cheer for good play for both teams	4.61	.789	4.55	.876	162	1.100	.273	
Cheer for athlete effort	4.67	.719	4.62	.755	162	1.069	.287	
Use profanity loud enough for athletes to hear	1.01	.079	1.01	.157	161	-1.000	.319	
Distract athletes from focusing on the game	1.06	.230	1.04	.204	161	1.000	.319	
Sit or stand silently and clap only when an athlete (or the team) does something good	3.09	1.539	3.05	1.535	162	.610	.542	
Yell something offensive to, or about, someone	1.01	.078	1.02	.191	162	-1.743	.083	

Note 1. Each response above was prefaced with the stem "In this situation, how acceptable is it for mothers to:" See Appendix C for full survey.

Note 2. Responses were 1 = Never appropriate, 2 = Appropriate once in a while, 3 = Sometimes appropriate, 4 = Usually appropriate, 5 = Always appropriate

Note 3. \* indicates significance at  $p < .05$

Table E47

*Hypothesis 5c: Differences in Acceptability of Fathers' Sideline Behavior Between Low and High Stakes Situations of Coach Incompetence (Baseball)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the field	1.02	.190	1.05	.347	163	-1.641	.103	
Act in a way that is embarrassing	1.03	.173	1.04	.280	162	-.631	.529	
Act like a 'bad sport'	1.02	.175	1.05	.290	162	-1.905	.059	
Yell at the umpire	1.05	.244	1.08	.294	161	-1.676	.096	
Yell at the coach(es)	1.03	.193	1.05	.292	159	-1.419	.158	
Verbally 'get into it'	1.04	.220	1.06	.300	161	-1.345	.181	
Physically 'get into it'	1.01	.111	1.01	.111	161	.000	1.000	
'Coach' from the sidelines	1.76	.853	1.77	.894	158	-.128	.899	
Encourage athletes to 'play rough'	1.03	.206	1.06	.329	161	-1.905	.059	
Encourage athletes to play outside the rules	1.03	.234	1.04	.292	162	-.332	.740	
Cheer for good play for both teams	4.59	.835	4.54	.929	163	.799	.425	
Cheer for athlete effort	4.61	.791	4.61	.791	160	.000	1.000	
Use profanity loud enough for athletes to hear	1.03	.260	1.04	.270	161	-1.000	.319	
Distract athletes from focusing on the game	1.07	.276	1.06	.255	161	1.000	.319	
Sit or stand silently and clap only when an athlete (or the team) does something good	3.09	1.577	3.10	1.497	162	-.204	.839	
Yell something offensive to, or about, someone	1.07	.504	1.06	.373	162	.446	.656	

*Note 1.* Each response above was prefaced with the stem "In this situation, how acceptable is it for fathers to:" See Appendix C for full survey.

*Note 2.* Responses were 1 = Never appropriate, 2 = Appropriate once in a while, 3 = Sometimes appropriate, 4 = Usually appropriate, 5 = Always appropriate

*Note 3.* \* indicates significance at  $p < .05$

Table E48

*Hypothesis 5c: Differences in Acceptability of Mothers' Sideline Behavior Between Low and High Stakes Situations of Umpire Incompetence (Baseball)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the field	1.04	.343	1.05	.219	159	-.218	.828	
Act in a way that is embarrassing	1.04	.343	1.04	.205	159	.000	1.000	
Act like a 'bad sport'	1.03	.325	1.03	.157	159	.218	.828	
Yell at the umpire	1.12	.469	1.13	.437	158	-.332	.740	
Yell at the coach(es)	1.04	.343	1.05	.246	159	-.199	.842	
Verbally 'get into it'	1.04	.334	1.02	.136	159	.653	.514	
Physically 'get into it'	1.03	.318	1.00	.000	157	1.000	.319	
'Coach' from the sidelines	1.51	.793	1.48	.718	159	.686	.494	
Encourage athletes to 'play rough'	1.08	.485	1.02	.136	158	1.485	.139	
Encourage athletes to play outside the rules	1.03	.316	1.03	.325	159	-.174	.862	
Cheer for good play for both teams	4.62	.784	4.64	.772	159	-.391	.696	
Cheer for athlete effort	4.73	.642	4.77	.606	159	-.716	.475	
Use profanity loud enough for athletes to hear	1.03	.325	1.02	.136	159	.470	.639	
Distract athletes from focusing on the game	1.04	.344	1.03	.157	158	.687	.493	
Sit or stand silently and clap only when an athlete (or the team) does something good	3.03	1.613	3.02	1.627	159	.075	.941	
Yell something offensive to, or about, someone	1.03	.329	1.05	.372	156	-.479	.632	

*Note 1.* Each response above was prefaced with the stem "In this situation, how acceptable is it for mothers to:" See Appendix C for full survey.

*Note 2.* Responses were 1 = Never appropriate, 2 = Appropriate once in a while, 3 = Sometimes appropriate, 4 = Usually appropriate, 5 = Always appropriate

*Note 3.* \* indicates significance at  $p < .05$

Table E49

*Hypothesis 5c: Differences in Acceptability of Fathers' Sideline Behavior Between Low and High Stakes Situations of Umpire Incompetence (Baseball)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the field	1.04	.343	1.06	.257	159	-.391	.696	
Act in a way that is embarrassing	1.05	.351	1.04	.234	159	.199	.842	
Act like a 'bad sport'	1.04	.345	1.03	.176	157	.407	.684	
Yell at the umpire	1.12	.429	1.15	.483	156	-.962	.338	
Yell at the coach(es)	1.04	.273	1.04	.191	158	.000	1.000	
Verbally 'get into it'	1.04	.275	1.02	.137	156	.774	.440	
Physically 'get into it'	1.03	.316	1.00	.000	159	1.000	.319	
'Coach' from the sidelines	1.54	.781	1.54	.805	156	-.179	.858	
Encourage athletes to 'play rough'	1.01	.113	1.03	.209	156	-1.743	.083	
Encourage athletes to play outside the rules	1.00	.000	1.01	.079	158	-1.000	.319	
Cheer for good play for both teams	4.65	.720	4.65	.746	159	.000	1.000	
Cheer for athlete effort	4.75	.573	4.74	.631	158	.257	.797	
Use profanity loud enough for athletes to hear	1.01	.079	1.02	.136	158	-1.419	.158	
Distract athletes from focusing on the game	1.02	.139	1.03	.178	152	-1.419	.158	
Sit or stand silently and clap only when an athlete (or the team) does something good	3.05	1.637	3.04	1.642	158	.151	.880	
Yell something offensive to, or about, someone	1.02	.239	1.05	.371	157	-.897	.371	

*Note 1.* Each response above was prefaced with the stem "In this situation, how acceptable is it for fathers to:" See Appendix C for full survey.

*Note 2.* Responses were 1 = Never appropriate, 2 = Appropriate once in a while, 3 = Sometimes appropriate, 4 = Usually appropriate, 5 = Always appropriate

*Note 3.* \* indicates significance at  $p < .05$

Table E50

*Hypothesis 5c: Differences in Acceptability of Mothers' Sideline Behavior Between Low and High Stakes Situations of Athlete Unsportsmanlike Conduct (Ice Hockey)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the ice	1.14	.421	1.12	.427	102	.631	.530	
Act in a way that is embarrassing	1.04	.194	1.03	.169	102	1.000	.320	
Act like a 'bad sport'	1.02	1.39	1.01	.099	101	.575	.566	
Yell at the referee	1.20	.451	1.20	.531	102	.000	1.000	
Yell at the coach(es)	1.05	.216	1.07	.253	102	-.631	.530	
Verbally 'get into it'	1.03	.170	1.05	.217	101	-1.421	.158	
Physically 'get into it'	1.01	.099	1.00	.000	102	1.000	.320	
'Coach' from the sidelines	1.38	.643	1.39	.689	102	-.185	.854	
Encourage athletes to 'play rough'	1.11	.447	1.09	.379	99	.705	.482	
Encourage athletes to play outside the rules	1.01	.099	1.06	.418	101	-1.216	.227	
Cheer for good play for both teams	4.46	1.036	4.43	1.081	102	.445	.657	
Cheer for athlete effort	4.53	.958	4.46	1.064	102	1.338	.184	
Use profanity loud enough for athletes to hear	1.03	.221	1.03	.221	101	.000	1.000	
Distract athletes from focusing on the game	1.04	.241	1.04	.241	-	-	-	
Sit or stand silently and clap only when an athlete (or the team) does something good	3.67	1.478	3.60	1.606	101	.592	.555	
Yell something offensive to, or about, someone	1.11	.543	1.09	.469	101	.705	.482	

*Note 1.* Each response above was prefaced with the stem "In this situation, how acceptable is it for mothers to:." See Appendix D for full survey.

*Note 2.* Responses were 1 = Never appropriate, 2 = Appropriate once in a while, 3 = Sometimes appropriate, 4 = Usually appropriate, 5 = Always appropriate

*Note 3.* \* indicates significance at  $p < .05$

Table E51

*Hypothesis 5c: Differences in Acceptability of Fathers' Sideline Behavior Between Low and High Stakes Situations of Athlete Unsportsmanlike Conduct (Ice Hockey)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the ice	1.14	.468	1.14	.423	101	.000	1.000	
Act in a way that is embarrassing	1.07	.289	1.06	.235	102	.575	.566	
Act like a 'bad sport'	1.06	.308	1.04	.194	102	1.000	.320	
Yell at the referee	1.20	.472	1.20	.531	102	.000	1.000	
Yell at the coach(es)	1.05	.257	1.07	.253	102	-.705	.482	
Verbally 'get into it'	1.04	.241	1.04	.241	-	-	-	
Physically 'get into it'	1.00	.000	1.02	.199	100	-1.000	.320	
'Coach' from the sidelines	1.43	.697	1.51	.793	101	-1.522	.131	
Encourage athletes to 'play rough'	1.12	.454	1.12	.454	100	.000	1.000	
Encourage athletes to play outside the rules	1.01	.100	1.06	.422	99	-1.216	.227	
Cheer for good play for both teams	4.39	1.127	4.55	.971	101	-2.219	.029*	.22
Cheer for athlete effort	4.47	1.050	4.58	.938	101	-1.617	.109	
Use profanity loud enough for athletes to hear	1.02	.197	1.04	.239	102	-1.421	.158	
Distract athletes from focusing on the game	1.03	.222	1.03	.222	-	-	-	
Sit or stand silently and clap only when an athlete (or the team) does something good	3.51	1.558	3.71	1.506	102	-2.074	.041*	.20
Yell something offensive to, or about, someone	1.08	.462	1.14	.617	100	-1.421	.158	

*Note 1.* Each response above was prefaced with the stem "In this situation, how acceptable is it for fathers to:" See Appendix D for full survey.

*Note 2.* Responses were 1 = Never appropriate, 2 = Appropriate once in a while, 3 = Sometimes appropriate, 4 = Usually appropriate, 5 = Always appropriate

*Note 3.* \* indicates significance at  $p < .05$

Table E52

*Hypothesis 5c: Differences in Acceptability of Mothers' Sideline Behavior Between Low and High Stakes Situations of Parent Unsportsmanlike Conduct (Ice Hockey)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the ice	1.04	.200	1.05	.265	96	-.575	.566	
Act in a way that is embarrassing	1.07	.297	1.07	.297	96	.000	1.000	
Act like a 'bad sport'	1.04	.247	1.05	.265	96	-.445	.657	
Yell at the referee	1.05	.331	1.06	.282	96	.332	.741	
Yell at the coach(es)	1.04	.202	1.03	.228	94	.575	.566	
Verbally 'get into it'	1.16	.488	1.13	.508	95	1.000	.320	
Physically 'get into it'	1.00	.000	1.00	.000	-	-	-	
'Coach' from the sidelines	1.37	.669	1.36	.713	94	.241	.810	
Encourage athletes to 'play rough'	1.05	.305	1.06	.352	94	-.575	.566	
Encourage athletes to play outside the rules	1.01	.102	1.01	.102	96	.000	1.000	
Cheer for good play for both teams	4.57	.840	4.47	.891	96	1.347	.181	
Cheer for athlete effort	4.70	.766	4.65	.817	96	.844	.401	
Use profanity loud enough for athletes to hear	1.04	.200	1.04	.200	96	.000	1.000	
Distract athletes from focusing on the game	1.02	.144	1.01	.102	95	1.000	.320	
Sit or stand silently and clap only when an athlete (or the team) does something good	3.53	1.601	3.47	1.634	96	.600	.550	
Yell something offensive to, or about, someone	1.14	.515	1.06	.350	95	1.970	.052	

*Note 1.* Each response above was prefaced with the stem "In this situation, how acceptable is it for mothers to:" See Appendix D for full survey.

*Note 2.* Responses were 1 = Never appropriate, 2 = Appropriate once in a while, 3 = Sometimes appropriate, 4 = Usually appropriate, 5 = Always appropriate

*Note 3.* \* indicates significance at  $p < .05$

Table E53

*Hypothesis 5c: Differences in Acceptability of Fathers' Sideline Behavior Between Low and High Stakes Situations of Parent Unsportsmanlike Conduct (Ice Hockey)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the ice	1.02	.203	1.03	.226	96	-1.000	.320	
Act in a way that is embarrassing	1.05	.223	1.06	.283	95	-.376	.708	
Act like a 'bad sport'	1.02	.144	1.04	.248	95	-.815	.417	
Yell at the referee	1.06	.318	1.07	.299	95	-.376	.708	
Yell at the coach(es)	1.03	.227	1.02	.204	95	1.000	.320	
Verbally 'get into it'	1.15	.464	1.13	.533	96	.705	.482	
Physically 'get into it'	1.00	.000	1.00	.000	-	-	-	
'Coach' from the sidelines	1.38	.669	1.35	.711	95	.469	.640	
Encourage athletes to 'play rough'	1.06	.353	1.06	.383	93	.000	1.000	
Encourage athletes to play outside the rules	1.01	.102	1.01	.102	96	.000	1.000	
Cheer for good play for both teams	4.52	.937	4.45	.913	96	.865	.389	
Cheer for athlete effort	4.63	.861	4.66	.765	95	-.478	.633	
Use profanity loud enough for athletes to hear	1.03	.174	1.03	.174	-	-	-	
Distract athletes from focusing on the game	1.01	.102	1.01	.102	-	-	-	
Sit or stand silently and clap only when an athlete (or the team) does something good	3.53	1.648	3.50	1.648	95	.354	.724	
Yell something offensive to, or about, someone	1.13	.552	1.13	.606	96	.000	1.000	

*Note 1.* Each response above was prefaced with the stem "In this situation, how acceptable is it for fathers to:" See Appendix D for full survey.

*Note 2.* Responses were 1 = Never appropriate, 2 = Appropriate once in a while, 3 = Sometimes appropriate, 4 = Usually appropriate, 5 = Always appropriate

*Note 3.* \* indicates significance at  $p < .05$



Table E54

*Hypothesis 5c: Differences in Acceptability of Mothers' Sideline Behavior Between Low and High Stakes Situations of Coach Incompetence (Ice Hockey)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the ice	1.00	.000	1.06	.273	103	-2.158	.033*	.21
Act in a way that is embarrassing	1.02	.138	1.05	.256	103	-1.000	.320	
Act like a 'bad sport'	1.01	.100	1.04	.196	100	-1.347	.181	
Yell at the referee	1.04	.239	1.12	.403	102	-2.360	.020*	.23
Yell at the coach(es)	1.02	.138	1.05	.215	103	-1.347	.181	
Verbally 'get into it'	1.02	.197	1.05	.216	102	-1.347	.181	
Physically 'get into it'	1.03	.296	1.00	.000	102	1.000	.320	
'Coach' from the sidelines	1.41	.709	1.43	.751	101	-.407	.685	
Encourage athletes to 'play rough'	1.05	.259	1.05	.259	101	.000	1.000	
Encourage athletes to play outside the rules	1.00	.000	1.01	.099	102	-1.000	.320	
Cheer for good play for both teams	4.66	.748	4.66	.722	102	.000	1.000	
Cheer for athlete effort	4.67	.749	4.78	.574	101	-2.408	.018*	.23
Use profanity loud enough for athletes to hear	1.01	.099	1.02	.139	101	-1.000	.320	
Distract athletes from focusing on the game	1.01	.099	1.00	.000	101	1.000	.320	
Sit or stand silently and clap only when an athlete (or the team) does something good	3.38	1.628	3.17	1.653	102	1.749	.083	
Yell something offensive to, or about, someone	1.05	.405	1.02	.139	102	.686	.494	

*Note 1.* Each response above was prefaced with the stem "In this situation, how acceptable is it for mothers to:" See Appendix D for full survey.

*Note 2.* Responses were 1 = Never appropriate, 2 = Appropriate once in a while, 3 = Sometimes appropriate, 4 = Usually appropriate, 5 = Always appropriate

*Note 3.* \* indicates significance at  $p < .05$

Table E55

*Hypothesis 5c: Differences in Acceptability of Fathers' Sideline Behavior Between Low and High Stakes Situations of Coach Incompetence (Ice Hockey)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the ice	1.00	.000	1.03	.169	102	-1.749	.083	
Act in a way that is embarrassing	1.01	.098	1.04	.238	103	-1.749	.083	
Act like a 'bad sport'	1.00	.000	1.02	.139	101	-1.421	.158	
Yell at the referee	1.05	.259	1.15	.454	101	-2.758	.007*	.26
Yell at the coach(es)	1.02	.138	1.07	.288	103	-2.281	.025*	.22
Verbally 'get into it'	1.01	.099	1.07	.350	102	-1.922	.057	
Physically 'get into it'	1.00	.000	1.00	.000	-	-	-	
'Coach' from the sidelines	1.45	.787	1.58	.889	103	-2.568	.012*	.25
Encourage athletes to 'play rough'	1.04	.239	1.11	.441	102	-1.618	.109	
Encourage athletes to play outside the rules	1.00	.000	1.03	.218	103	-1.347	.181	
Cheer for good play for both teams	4.64	.799	4.60	.887	103	.928	.356	
Cheer for athlete effort	4.70	.739	4.76	.602	102	-1.283	.202	
Use profanity loud enough for athletes to hear	1.02	.196	1.04	.238	103	-1.421	.158	
Distract athletes from focusing on the game	1.01	.098	1.00	.000	103	1.000	.320	
Sit or stand silently and clap only when an athlete (or the team) does something good	3.18	1.618	3.13	1.667	103	.422	.674	
Yell something offensive to, or about, someone	1.07	.446	1.09	.464	103	-1.421	.158	

Note 1. Each response above was prefaced with the stem "In this situation, how acceptable is it for fathers to:" See Appendix D for full survey.

Note 2. Responses were 1 = Never appropriate, 2 = Appropriate once in a while, 3 = Sometimes appropriate, 4 = Usually appropriate, 5 = Always appropriate

Note 3. \* indicates significance at  $p < .05$

Table E56

*Hypothesis 5c: Differences in Acceptability of Mothers' Sideline Behavior Between Low and High Stakes Situations of Referee Incompetence (Ice Hockey)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the ice	1.07	.351	1.09	.396	109	-1.000	.320	
Act in a way that is embarrassing	1.06	.310	1.10	.404	110	-1.421	.158	
Act like a 'bad sport'	1.05	.264	1.07	.349	110	-.706	.482	
Yell at the referee	1.18	.510	1.20	.555	109	-.533	.595	
Yell at the coach(es)	1.06	.313	1.09	.374	108	-1.347	.181	
Verbally 'get into it'	1.06	.279	1.08	.334	110	-1.000	.320	
Physically 'get into it'	1.02	.192	1.03	.213	108	-1.000	.320	
'Coach' from the sidelines	1.38	.739	1.35	.683	110	.576	.566	
Encourage athletes to 'play rough'	1.05	.298	1.08	.335	109	-1.748	.083	
Encourage athletes to play outside the rules	1.03	.212	1.05	.249	109	-1.421	.158	
Cheer for good play for both teams	4.58	.826	4.53	.861	110	.761	.448	
Cheer for athlete effort	4.67	.705	4.64	.787	109	.894	.374	
Use profanity loud enough for athletes to hear	1.04	.267	1.05	.264	110	-1.000	.320	
Distract athletes from focusing on the game	1.06	.313	1.06	.266	108	.576	.566	
Sit or stand silently and clap only when an athlete (or the team) does something good	3.43	1.594	3.49	1.555	109	-.695	.489	
Yell something offensive to, or about, someone	1.10	.468	1.08	.386	109	.407	.685	

*Note 1.* Each response above was prefaced with the stem "In this situation, how acceptable is it for mothers to:" See Appendix D for full survey.

*Note 2.* Responses were 1 = Never appropriate, 2 = Appropriate once in a while, 3 = Sometimes appropriate, 4 = Usually appropriate, 5 = Always appropriate

*Note 3.* \* indicates significance at  $p < .05$

Table E57

*Hypothesis 5c: Differences in Acceptability of Fathers' Sideline Behavior Between Low and High Stakes Situations of Referee Incompetence (Ice Hockey)*

Behavior	Low stakes		High stakes		df	t	p	r
	M	SD	M	SD				
Yell at athletes on the ice	1.07	.349	1.10	.404	110	-1.347	.181	
Act in a way that is embarrassing	1.07	.349	1.10	.404	110	-1.135	.259	
Act like a 'bad sport'	1.06	.311	1.07	.351	109	-.376	.707	
Yell at the referee	1.17	.502	1.20	.553	110	-.904	.368	
Yell at the coach(es)	1.06	.313	1.09	.374	108	-1.347	.181	
Verbally 'get into it'	1.07	.293	1.08	.334	110	-.576	.566	
Physically 'get into it'	1.02	.192	1.03	.213	108	-1.000	.320	
'Coach' from the sidelines	1.40	.717	1.35	.683	110	1.149	.253	
Encourage athletes to 'play rough'	1.07	.325	1.08	.337	108	-.446	.657	
Encourage athletes to play outside the rules	1.05	.249	1.05	.249	109	.000	1.000	
Cheer for good play for both teams	4.56	.828	4.53	.861	110	.403	.688	
Cheer for athlete effort	4.68	.676	4.64	.784	110	.754	.452	
Use profanity loud enough for athletes to hear	1.03	.211	1.05	.264	110	-1.748	.083	
Distract athletes from focusing on the game	1.06	.266	1.06	.266	108	.000	1.000	
Sit or stand silently and clap only when an athlete (or the team) does something good	3.56	1.548	3.49	1.555	109	.894	.374	
Yell something offensive to, or about, someone	1.11	.495	1.08	.386	109	.687	.494	

Note 1. Each response above was prefaced with the stem "In this situation, how acceptable is it for fathers to:" See Appendix D for full survey.

Note 2. Responses were 1 = Never appropriate, 2 = Appropriate once in a while, 3 = Sometimes appropriate, 4 = Usually appropriate, 5 = Always appropriate

Note 3. \* indicates significance at  $p < .05$

Table E58

*Hypothesis 6a: Means and Standard Deviations for Likelihood of Different Behaviors in Four Occurrences (Baseball, Mothers Only)*

Behaviors	Umpire		Athlete		Coach		Parent	
	Incompetence		Unsportsmanlike		Incompetence		Unsportsmanlike	
	M	SD	M	SD	M	SD	M	SD
Yell at athletes on the field	1.82	.892	1.61	.796	1.61	.803	1.65	.815
Act in a way that is embarrassing	2.11	.945	1.55	.735	1.77	.860	1.77	.803
Act like a ‘bad sport’	2.17	.946	1.49	.736	1.89	.844	1.76	.799
Yell at the umpire	2.47	1.003	1.47	.708	1.66	.790	1.57	.775
Yell at the coach(es)	1.67	.792	1.42	.688	1.81	.848	1.57	.748
Verbally ‘get into it’	1.74	.823	1.37	.637	1.65	.788	1.91	.875
Physically ‘get into it’	1.23	.494	1.14	.388	1.20	.472	1.19	.487
‘Coach’ from the sidelines	2.36	1.024	2.19	1.043	2.50	.965	2.56	1.005
Encourage athletes to ‘play rough’	1.45	.699	1.23	.495	1.42	.692	1.39	.623
Encourage athletes to play outside the rules	1.38	.654	1.22	.476	1.41	.681	1.34	.614
Cheer for good play for both teams	3.71	1.097	3.76	1.092	3.80	1.024	3.82	1.054
Cheer for athlete effort	4.01	.921	3.91	1.029	4.17	.833	4.19	.876
Use profanity loud enough for athletes to hear	1.67	.760	1.40	.589	1.50	.698	1.46	.671
Distract athletes from focusing on the game	1.53	.710	1.49	.699	1.64	.786	1.57	.778
Sit or stand silently and clap only when an athlete (or the team) does something good	2.96	1.210	2.94	1.294	3.01	1.228	2.80	1.249
Yell something offensive to, or about, someone	1.79	.842	1.45	.697	1.65	.811	1.75	.872

*Note 1.* Each response above was prefaced with the stem “In this situation, how likely do you think mothers are to:” See Appendix C for full survey.

*Note 2.* Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

Table E59

*Hypothesis 6a: Analysis of Variance Results for Likelihood of Different Behaviors in Four Occurrences (Baseball, Mothers Only)*

Behaviors	<i>df<sub>B</sub></i>	<i>df<sub>W</sub></i>	<i>F</i>	<i>p</i>	<i>t</i>	<i>df</i>	<i>p</i> (one-tailed)	<i>r</i>
Yell at athletes on the field	3	621	2.133	.095				
Act in a way that is embarrassing	3	341.760	11.388 <sup>a</sup>	.000*	4.883	240.569	.000*	.30
Act like a 'bad sport'	3	340.710	17.764 <sup>a</sup>	.000*	5.484	237.214	.000*	.34
Yell at the umpire	3	341.864	37.921 <sup>a</sup>	.000*	10.360	225.154	.000*	.57
Yell at the coach(es)	3	342.469	7.322 <sup>a</sup>	.000*	1.019	265.577	.153	
Verbally 'get into it'	3	340.392	14.210 <sup>a</sup>	.000*	1.213	259.806	.113	
Physically 'get into it'	3	341.015	1.161 <sup>a</sup>	.325				
'Coach' from the sidelines	3	620	4.137	.006*	-.665	620	.253	
Encourage athletes to 'play rough'	3	342.045	4.769 <sup>a</sup>	.003*	1.687	246.543	.047*	.11
Encourage athletes to play outside the rules	3	340.961	3.578 <sup>a</sup>	.014*	.927	250.592	.178	
Cheer for good play for both teams	3	619	.380	.768				
Cheer for athlete effort	3	620	3.212	.023*	-1.014	620	.156	
Use profanity loud enough for athletes to hear	3	337.338	4.169 <sup>a</sup>	.006*	3.155	244.490	.001*	.20
Distract athletes from focusing on the game	3	616	1.107	.346				
Sit or stand silently and clap only when an athlete (or the team) does something good	3	617	.790	.500				
Yell something offensive to, or about, someone	3	342.938	6.158 <sup>a</sup>	.000*	2.228	263.330	.014*	.14

Note 1. <sup>a</sup> indicates Welch statistic was used because Levene's test was significant

Note 2. \* indicates significance at  $p < .05$

Table E60

*Hypothesis 6a: Means and Standard Deviations for Likelihood of Different Behaviors in Four Occurrences (Baseball, Fathers Only)*

Behaviors	Umpire		Athlete		Coach		Parent	
	Incompetence		Unsportsmanlike		Incompetence		Unsportsmanlike	
	M	SD	M	SD	M	SD	M	SD
Yell at athletes on the field	2.06	.998	1.78	.856	1.83	.963	1.89	.866
Act in a way that is embarrassing	2.24	.943	1.72	.854	1.93	.924	1.93	.842
Act like a ‘bad sport’	2.31	.938	1.70	.877	2.05	.955	1.98	.903
Yell at the umpire	2.65	.981	1.68	.833	1.82	.938	1.87	.889
Yell at the coach(es)	1.97	.957	1.58	.800	2.01	.969	1.80	.819
Verbally ‘get into it’	1.97	.893	1.51	.746	1.81	.897	2.01	.906
Physically ‘get into it’	1.36	.608	1.22	.503	1.32	.596	1.36	.639
‘Coach’ from the sidelines	2.64	1.090	2.47	1.070	2.77	1.031	2.72	.975
Encourage athletes to ‘play rough’	1.63	.847	1.33	.616	1.62	.847	1.64	.802
Encourage athletes to play outside the rules	1.49	.756	1.32	.604	1.50	.774	1.56	.731
Cheer for good play for both teams	3.60	1.125	3.69	1.084	3.68	1.074	3.69	1.093
Cheer for athlete effort	3.96	.926	3.88	1.048	3.94	.941	4.05	.909
Use profanity loud enough for athletes to hear	1.99	.908	1.58	.783	1.69	.834	1.76	.852
Distract athletes from focusing on the game	1.69	.826	1.55	.762	1.75	.854	1.77	.825
Sit or stand silently and clap only when an athlete (or the team) does something good	3.01	1.163	2.81	1.245	2.94	1.145	2.75	1.204
Yell something offensive to, or about, someone	2.06	.979	1.56	.785	1.76	.914	1.95	.920

*Note 1.* Each response above was prefaced with the stem “In this situation, how likely do you think fathers are to:” See Appendix C for full survey.

*Note 2.* Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

Table E61

*Hypothesis 6a: Analysis of Variance Results for Likelihood of Different Behaviors in Four Occurrences (Baseball, Fathers Only)*

<i>Behaviors</i>	<i>df<sub>B</sub></i>	<i>df<sub>W</sub></i>	<i>F</i>	<i>p</i>	<i>t</i>	<i>df</i>	<i>p</i> <i>(one-tailed)</i>	<i>r</i>
Yell at athletes on the field	3	344.742	2.446 <sup>a</sup>	.064				
Act in a way that is embarrassing	3	344.251	8.922 <sup>a</sup>	.000*	4.532	259.063	.000*	.27
Act like a 'bad sport'	3	618	11.541	.000*	4.712	618	.000*	.19
Yell at the umpire	3	618	36.765	.000*	10.336	618	.000*	.38
Yell at the coach(es)	3	343.587	7.826 <sup>a</sup>	.000*	2.026	251.596	.022*	.13
Verbally 'get into it'	3	619	10.710	.000*	2.419	619	.008*	.10
Physically 'get into it'	3	342.244	2.144 <sup>a</sup>	.094				
'Coach' from the sidelines	3	342.815	2.418 <sup>a</sup>	.066				
Encourage athletes to 'play rough'	3	344.313	7.707 <sup>a</sup>	.000*	1.387	248.279	.084	
Encourage athletes to play outside the rules	3	340.245	3.902 <sup>a</sup>	.009*	.449	254.385	.327	
Cheer for good play for both teams	3	620	.229	.876				
Cheer for athlete effort	3	616	.772	.510				
Use profanity loud enough for athletes to hear	3	620	6.678	.000*	4.052	620	.000*	.16
Distract athletes from focusing on the game	3	619	2.359	.071				
Sit or stand silently and clap only when an athlete (or the team) does something good	3	619	1.539	.203				
Yell something offensive to, or about, someone	3	342.917	9.652 <sup>a</sup>	.000*	3.449	252.028	.001*	.21

*Note 1.* <sup>a</sup> indicates Welch statistic was used because Levene's test was significant

*Note 2.* \* indicates significance at  $p < .05$



Table E62

*Hypothesis 6a: Means and Standard Deviations for Likelihood of Different Behaviors in Four Occurrences (Ice Hockey, Mothers Only)*

Behaviors	Referee		Athlete		Coach		Parent	
	Incompetence		Unsportsmanlike Conduct		Incompetence		Unsportsmanlike Conduct	
	M	SD	M	SD	M	SD	M	SD
Yell at athletes on the ice	2.36	1.051	2.73	1.211	1.97	.940	2.13	.885
Act in a way that is embarrassing	2.42	1.017	2.50	.989	2.11	.934	2.28	.787
Act like a ‘bad sport’	2.46	1.005	2.42	.995	2.17	.918	2.20	.829
Yell at the referee	2.87	1.080	2.85	1.070	2.20	.959	2.22	.869
Yell at the coach(es)	1.96	.943	2.17	.940	1.91	.915	1.97	.871
Verbally ‘get into it’	2.02	.944	2.05	.927	1.78	.824	2.26	.881
Physically ‘get into it’	1.26	.536	1.34	.552	1.24	.512	1.45	.663
‘Coach’ from the sidelines	2.35	1.157	2.59	1.070	2.75	1.040	2.51	1.052
Encourage athletes to ‘play rough’	1.79	.926	1.97	1.000	1.79	.855	1.95	.834
Encourage athletes to play outside the rules	1.66	.889	1.63	.897	1.45	.669	1.70	.806
Cheer for good play for both teams	3.31	1.204	3.45	1.242	3.52	1.246	3.42	1.153
Cheer for athlete effort	3.81	1.083	3.75	1.186	4.19	.936	3.91	.969
Use profanity loud enough for athletes to hear	1.95	.907	1.84	.905	1.62	.792	1.87	.824
Distract athletes from focusing on the game	1.87	.879	1.80	.878	1.60	.830	1.77	.865
Sit or stand silently and clap only when an athlete (or the team) does something good	2.95	1.087	3.01	1.067	2.88	1.177	3.11	1.035
Yell something offensive to, or about, someone	2.23	1.037	2.03	.953	1.81	.936	2.09	.859

*Note 1.* Each response above was prefaced with the stem “In this situation, how likely do you think mothers are to:” See Appendix D for full survey.

*Note 2.* Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

Table E63

*Hypothesis 6a: Analysis of Variance Results for Likelihood of Different Behaviors in Four Occurrences (Ice Hockey, Mothers Only)*

Behaviors	<i>df<sub>B</sub></i>	<i>df<sub>W</sub></i>	<i>F</i>	<i>p</i>	<i>t</i>	<i>df</i>	<i>p</i> (one-tailed)	<i>r</i>
Yell at athletes on the ice	3	411	10.931	.000*	.740	411	.230	
Act in a way that is embarrassing	3	227.550	10.186	.000*	1.137	175.158	.129	
Act like a 'bad sport'	3	408	2.532	.057				
Yell at the referee	3	411	14.811	.000*	4.048	411	.000*	.20
Yell at the coach(es)	3	411	1.507	.212				
Verbally 'get into it'	3	410	4.822	.003*	-1.106	410	.458	
Physically 'get into it'	3	224.170	2.380	.071				
'Coach' from the sidelines	3	411	2.534	.056				
Encourage athletes to 'play rough'	3	226.909	1.196	.312				
Encourage athletes to play outside the rules	3	225.552	2.353	.073				
Cheer for good play for both teams	3	411	.574	.633				
Cheer for athlete effort	3	411	3.659	.013*	-1.187	411	.118	
Use profanity loud enough for athletes to hear	3	409	2.970	.032*	1.863	409	.032*	.09
Distract athletes from focusing on the game	3	410	2.096	.100				
Sit or stand silently and clap only when an athlete (or the team) does something good	3	407	.807	.490				
Yell something offensive to, or about, someone	3	407	3.592	.014*	2.360	407	.010*	.12

Note 1. <sup>a</sup> indicates Welch statistic was used because Levene's test was significant

Note 2. \* indicates significance at  $p < .05$

Table E64

*Hypothesis 6a: Means and Standard Deviations for Likelihood of Different Behaviors in Four Occurrences (Ice Hockey, Fathers Only)*

Behaviors	Referee		Athlete		Coach		Parent	
	Incompetence		Unsportsmanlike		Incompetence		Unsportsmanlike	
	M	SD	M	SD	M	SD	M	SD
Yell at athletes on the ice	2.50	1.069	2.74	1.048	2.30	.944	2.38	.907
Act in a way that is embarrassing	2.53	.952	2.48	.909	2.27	.968	2.39	.836
Act like a ‘bad sport’	2.53	.971	2.50	.931	2.31	.940	2.40	.850
Yell at the referee	3.01	.977	2.95	1.042	2.36	.975	2.48	.925
Yell at the coach(es)	2.15	.955	2.25	1.009	2.14	.989	2.11	.905
Verbally ‘get into it’	2.09	.977	2.09	.924	1.91	.871	2.46	.917
Physically ‘get into it’	1.51	.699	1.51	.712	1.37	.624	1.68	.771
‘Coach’ from the sidelines	2.69	1.143	2.85	1.103	3.06	1.131	2.76	1.064
Encourage athletes to ‘play rough’	2.06	1.038	2.22	1.120	2.10	.981	2.07	.874
Encourage athletes to play outside the rules	1.77	.914	1.83	1.014	1.63	.801	1.81	.821
Cheer for good play for both teams	3.40	1.056	3.33	1.175	3.38	1.233	3.36	1.165
Cheer for athlete effort	3.75	1.015	3.57	1.108	3.99	.917	3.81	.971
Use profanity loud enough for athletes to hear	2.14	1.031	2.13	.987	1.88	.862	2.06	.864
Distract athletes from focusing on the game	2.05	.961	2.09	.951	1.82	.879	2.02	.890
Sit or stand silently and clap only when an athlete (or the team) does something good	2.90	1.103	3.05	1.042	2.97	1.153	3.02	1.060
Yell something offensive to, or about, someone	2.34	1.094	2.21	1.006	2.00	.955	2.29	.901

*Note 1.* Each response above was prefaced with the stem “In this situation, how likely do you think fathers are to:” See Appendix D for full survey.

*Note 2.* Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

Table E65

*Hypothesis 6a: Analysis of Variance Results for Likelihood of Different Behaviors in Four Occurrences (Ice Hockey, Fathers Only)*

<i>Behaviors</i>	<i>df<sub>B</sub></i>	<i>df<sub>W</sub></i>	<i>F</i>	<i>p</i>	<i>t</i>	<i>df</i>	<i>p</i> <i>(one-tailed)</i>	<i>r</i>
Yell at athletes on the ice	3	411	3.791	.011*	.290	411	.386	
Act in a way that is embarrassing	3	410	1.653	.177				
Act like a 'bad sport'	3	409	1.228	.299				
Yell at the referee	3	411	11.737	.000*	3.783	411	.000*	.18
Yell at the coach(es)	3	409	.342	.795				
Verbally 'get into it'	3	409	6.080	.000*	-.616	409	.269	
Physically 'get into it'	3	226.191	3.391	.019*	-.085	196.998	.466	
'Coach' from the sidelines	3	409	2.139	.095				
Encourage athletes to 'play rough'	3	227.184	.487	.692				
Encourage athletes to play outside the rules	3	411	.989	.398				
Cheer for good play for both teams	3	411	.067	.977				
Cheer for athlete effort	3	406	2.991	.031*	-.372	406	.372	
Use profanity loud enough for athletes to hear	3	227.892	1.713	.165				
Distract athletes from focusing on the game	3	411	1.809	.145				
Sit or stand silently and clap only when an athlete (or the team) does something good	3	411	.376	.771				
Yell something offensive to, or about, someone	3	227.662	2.392	.069				

*Note 1.* <sup>a</sup> indicates Welch statistic was used because Levene's test was significant

*Note 2.* \* indicates significance at  $p < .05$

Table E66

*Hypothesis 6b: Means and Standard Deviations for Likelihood of Different Behaviors in Four Occurrences (Baseball)*

Behaviors	Umpire		Athlete		Coach		Parent	
	Incompetence		Unsportsmanlike		Incompetence		Unsportsmanlike	
	M	SD	M	SD	M	SD	M	SD
Yell at athletes on the field	1.18	.456	1.11	.336	1.12	.375	1.08	.320
Act in a way that is embarrassing	1.28	.539	1.12	.362	1.16	.419	1.14	.399
Act like a ‘bad sport’	1.36	.619	1.09	.303	1.23	.478	1.12	.360
Yell at the umpire	1.60	.797	1.10	.307	1.20	.455	1.15	.410
Yell at the coach(es)	1.13	.423	1.05	.210	1.13	.376	1.09	.328
Verbally ‘get into it’	1.16	.434	1.07	.273	1.11	.314	1.25	.547
Physically ‘get into it’	1.03	.237	1.00	.000	1.01	.110	1.00	.000
‘Coach’ from the sidelines	1.92	1.037	1.89	1.036	2.11	.988	2.23	1.137
Encourage athletes to ‘play rough’	1.08	.328	1.03	.178	1.10	.318	1.05	.255
Encourage athletes to play outside the rules	1.05	.270	1.02	.139	1.05	.217	1.04	.230
Cheer for good play for both teams	4.18	.968	4.09	1.060	4.09	1.014	4.25	.932
Cheer for athlete effort	4.45	.746	4.20	1.061	4.34	.916	4.54	.694
Use profanity loud enough for athletes to hear	1.19	.482	1.07	.250	1.15	.388	1.11	.341
Distract athletes from focusing on the game	1.18	.456	1.14	.399	1.19	.440	1.16	.420
Sit or stand silently and clap only when an athlete (or the team) does something good	2.93	1.383	2.77	1.349	2.99	1.320	2.56	1.340
Yell something offensive to, or about, someone	1.18	.538	1.08	.316	1.11	.368	1.19	.500

*Note 1.* Each response above was prefaced with the stem “In this situation, how likely are you to:” See Appendix C for full survey.

*Note 2.* Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

Table E67

*Hypothesis 6b: Analysis of Variance Results for Likelihood of Different Behaviors in Four Occurrences (Baseball)*

<i>Behaviors</i>	<i>df<sub>B</sub></i>	<i>df<sub>W</sub></i>	<i>F</i>	<i>p</i>	<i>t</i>	<i>df</i>	<i>p</i> <i>(one-tailed)</i>	<i>r</i>
Yell at athletes on the field	3	343.504	1.691 <sup>a</sup>	.211				
Act in a way that is embarrassing	3	341.707	4.194 <sup>a</sup>	.019*	2.955	218.654	.002*	.20
Act like a 'bad sport'	3	337.770	11.403 <sup>a</sup>	.000*	4.105	201.277	.000*	.28
Yell at the umpire	3	334.538	29.043 <sup>a</sup>	.000*	6.813	185.171	.000*	.45
Yell at the coach(es)	3	332.658	2.287 <sup>a</sup>	.021*	1.170	219.326	.122	
Verbally 'get into it'	3	332.211	5.939 <sup>a</sup>	.001*	.543	252.854	.294	
Physically 'get into it' <sup>b</sup>	3	-	-	-				
'Coach' from the sidelines	3	341.678	3.626 <sup>a</sup>	.017*	-1.650	278.355	.050*	.10
Encourage athletes to 'play rough'	3	336.343	1.585 <sup>a</sup>	.119				
Encourage athletes to play outside the rules	3	333.134	.648 <sup>a</sup>	.376				
Cheer for good play for both teams	3	621	.897	.442				
Cheer for athlete effort	3	339.571	4.343 <sup>a</sup>	.006*	1.183	319.390	.119	
Use profanity loud enough for athletes to hear	3	337.265	3.112 <sup>a</sup>	.014*	2.055	212.535	.021*	.14
Distract athletes from focusing on the game	3	614	.454	.715				
Sit or stand silently and clap only when an athlete (or the team) does something good	3	619	3.038	.029*	1.249	268.674	.107	
Yell something offensive to, or about, someone	3	335.902	2.349 <sup>a</sup>	.056				

Note 1. <sup>a</sup> indicates Welch statistic was used because Levene's test was significant

Note 2. <sup>b</sup> indicates test could not be performed because at least one group has 0 variance

Note 3. \* indicates significance at  $p < .05$

Table E68

*Hypothesis 6b: Means and Standard Deviations for Likelihood of Different Behaviors in Four Occurrences (Ice Hockey)*

Behaviors	Referee		Athlete		Coach		Parent	
	Incompetence		Unsportsmanlike Conduct		Incompetence		Unsportsmanlike Conduct	
	M	SD	M	SD	M	SD	M	SD
Yell at athletes on the ice	1.25	.532	1.61	.819	1.13	.419	1.15	.441
Act in a way that is embarrassing	1.28	.590	1.37	.657	1.22	.502	1.23	.468
Act like a ‘bad sport’	1.36	.658	1.26	.544	1.17	.422	1.19	.464
Yell at the referee	1.67	.908	1.71	.893	1.36	.624	1.31	.601
Yell at the coach(es)	1.15	.446	1.18	.454	1.12	.350	1.10	.368
Verbally ‘get into it’	1.09	.348	1.10	.359	1.12	.350	1.29	.520
Physically ‘get into it’	1.03	.211	1.02	.198	1.01	.098	1.02	.162
‘Coach’ from the sidelines	1.75	.958	1.76	.934	1.99	1.119	1.72	.898
Encourage athletes to ‘play rough’	1.16	.458	1.16	.500	1.19	.543	1.15	.486
Encourage athletes to play outside the rules	1.08	.363	1.04	.239	1.05	.257	1.06	.283
Cheer for good play for both teams	3.87	1.037	4.02	1.075	3.91	1.142	3.85	1.064
Cheer for athlete effort	4.26	.941	4.24	1.014	4.48	.812	4.32	.873
Use profanity loud enough for athletes to hear	1.20	.519	1.14	.397	1.11	.367	1.11	.319
Distract athletes from focusing on the game	1.17	.448	1.17	.466	1.10	.327	1.13	.364
Sit or stand silently and clap only when an athlete (or the team) does something good	3.15	1.237	3.25	1.242	2.89	1.434	3.05	1.348
Yell something offensive to, or about, someone	1.21	.524	1.20	.600	1.12	.402	1.21	.519

*Note 1.* Each response above was prefaced with the stem “In this situation, how likely are you to:” See Appendix D for full survey.

*Note 2.* Responses were 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Almost all the time, 5 = All of the time

Table E69

*Hypothesis 6b: Analysis of Variance Results for Likelihood of Different Behaviors in Four Occurrences (Ice Hockey)*

<i>Behaviors</i>	<i>df<sub>B</sub></i>	<i>df<sub>W</sub></i>	<i>F</i>	<i>p</i>	<i>t</i>	<i>df</i>	<i>p</i> <i>(one-tailed)</i>	<i>r</i>
Yell at athletes on the ice	3	223.773	10.069	.000*	-.751	205.943	.227	
Act in a way that is embarrassing	3	227.278	1.347	.260				
Act like a 'bad sport'	3	225.779	2.655	.049*	2.275	154.878	.012*	.18
Yell at the referee	3	226.086	7.445	.000*	2.174	162.416	.016*	.17
Yell at the coach(es)	3	409	.653	.581				
Verbally 'get into it'	3	222.336	3.735	.012*	-1.838	223.739	.034*	.12
Physically 'get into it' <sup>b</sup>	3	410	.275	.843				
'Coach' from the sidelines	3	227.319	1.404	.242				
Encourage athletes to 'play rough'	3	410	.145	.933				
Encourage athletes to play outside the rules	3	407	.509	.716				
Cheer for good play for both teams	3	411	1.466	.676				
Cheer for athlete effort	3	411	1.123	.223				
Use profanity loud enough for athletes to hear	3	227.771	.879	.452				
Distract athletes from focusing on the game	3	224.010	.914	.435				
Sit or stand silently and clap only when an athlete (or the team) does something good	3	410	1.401	.242				
Yell something offensive to, or about, someone	3	224.867	1.086	.356				

Note 1. <sup>a</sup> indicates Welch statistic was used because Levene's test was significant

Note 2. <sup>b</sup> indicates test could not be performed because at least one group has 0 variance

Note 3. \* indicates significance at  $p < .05$



Table E70

*Hypothesis 6c: Means and Standard Deviations for Acceptability of Different Behaviors in Four Occurrences (Baseball, Mothers Only)*

Behaviors	Umpire		Athlete		Coach		Parent	
	Incompetence		Unsportsmanlike		Incompetence		Unsportsmanlike	
	M	SD	M	SD	M	SD	M	SD
Yell at athletes on the field	1.05	.219	1.05	.239	1.03	.205	1.01	.082
Act in a way that is embarrassing	1.04	.205	1.03	.178	1.02	.174	1.04	.199
Act like a ‘bad sport’	1.03	.157	1.01	.115	1.04	.218	1.01	.116
Yell at the umpire	1.13	.437	1.02	.139	1.05	.244	1.03	.201
Yell at the coach(es)	1.05	.246	1.01	.114	1.03	.205	1.03	.165
Verbally ‘get into it’	1.02	.136	1.01	.081	1.04	.232	1.06	.315
Physically ‘get into it’	1.00	.000	1.00	.000	1.01	.078	1.00	.000
‘Coach’ from the sidelines	1.48	.718	1.68	.916	1.72	.807	1.77	.983
Encourage athletes to ‘play rough’	1.02	.136	1.00	.000	1.02	.155	1.03	.202
Encourage athletes to play outside the rules	1.03	.325	1.00	.000	1.01	.079	1.02	.142
Cheer for good play for both teams	4.64	.772	4.52	.918	4.55	.876	4.57	.901
Cheer for athlete effort	4.77	.606	4.54	.925	4.62	.755	4.65	.810
Use profanity loud enough for athletes to hear	1.02	.136	1.00	.000	1.01	.157	1.01	.082
Distract athletes from focusing on the game	1.03	.157	1.08	.293	1.04	.203	1.05	.244
Sit or stand silently and clap only when an athlete (or the team) does something good	3.02	1.627	3.05	1.621	3.05	1.535	2.88	1.646
Yell something offensive to, or about, someone	1.05	.370	1.01	.162	1.02	.190	1.05	.261

*Note 1.* Each response above was prefaced with the stem “In this situation, how acceptable is it for mothers to:” See Appendix C for full survey.

*Note 2.* Responses were 1 = Never appropriate, 2 = Appropriate once in a while, 3 = Sometimes appropriate, 4 = Usually appropriate, 5 = Always appropriate

Table E71

*Hypothesis 6c: Analysis of Variance Results for Acceptability of Different Behaviors in Four Occurrences (Baseball, Mothers Only)*

Behaviors	df <sub>B</sub>	df <sub>W</sub>	F	p	t	df	<i>p</i> (one-tailed)	r
Yell at athletes on the field	3	314.010	2.923 <sup>a</sup>	.034*	1.154	241.859	.125	
Act in a way that is embarrassing	3	620	.583	.626				
Act like a 'bad sport'	3	340.317	.656 <sup>a</sup>	.580				
Yell at the umpire	3	327.574	3.462 <sup>a</sup>	.017*	2.786	180.888	.003*	.20
Yell at the coach(es)	3	333.288	1.195 <sup>a</sup>	.312				
Verbally 'get into it'	3	312.422	2.424 <sup>a</sup>	.066				
Physically 'get into it' <sup>b</sup>	3	-	-	-				
'Coach' from the sidelines	3	334.413	3.999 <sup>a</sup>	.008*	-3.403	347.080	.001*	.18
Encourage athletes to 'play rough' <sup>b</sup>	3	-	-	-				
Encourage athletes to play outside the rules <sup>b</sup>	3	-	-	-				
Cheer for good play for both teams	3	618	.604	.613				
Cheer for athlete effort	3	336.257	2.744 <sup>a</sup>	.043*	2.701	377.575	.004*	.14
Use profanity loud enough for athletes to hear <sup>b</sup>	3	-	-	-				
Distract athletes from focusing on the game	3	331.499	1.420 <sup>a</sup>	.237				
Sit or stand silently and clap only when an athlete (or the team) does something good	3	618	.367	.777				
Yell something offensive to, or about, someone	3	330.918	.858 <sup>a</sup>	.463				

Note 1. <sup>a</sup> indicates Welch statistic was used because Levene's test was significant

Note 2. <sup>b</sup> indicates test could not be performed because at least one group has 0 variance

Note 3. \* indicates significance at  $p < .05$

Table E72

*Hypothesis 6c: Means and Standard Deviations for Acceptability of Different Behaviors in Four Occurrences (Baseball, Fathers Only)*

Behaviors	Umpire		Athlete		Coach		Parent	
	Incompetence		Unsportsmanlike		Incompetence		Unsportsmanlike	
	M	SD	M	SD	M	SD	M	SD
Yell at athletes on the field	1.06	.257	1.03	.212	1.05	.347	1.03	.200
Act in a way that is embarrassing	1.04	.234	1.04	.212	1.04	.280	1.03	.257
Act like a ‘bad sport’	1.03	.175	1.01	.162	1.05	.290	1.03	.216
Yell at the umpire	1.16	.484	1.07	.298	1.08	.294	1.07	.365
Yell at the coach(es)	1.04	.191	1.02	.139	1.06	.300	1.03	.246
Verbally ‘get into it’	1.02	.136	1.01	.114	1.06	.299	1.09	.410
Physically ‘get into it’	1.00	.000	1.00	.000	1.01	.110	1.00	.000
‘Coach’ from the sidelines	1.53	.802	1.80	.941	1.76	.894	1.91	1.039
Encourage athletes to ‘play rough’	1.03	.208	1.01	.082	1.06	.328	1.04	.230
Encourage athletes to play outside the rules	1.01	.079	1.00	.000	1.04	.292	1.03	.200
Cheer for good play for both teams	4.65	.746	4.51	.949	4.54	.929	4.59	.848
Cheer for athlete effort	4.74	.629	4.53	.953	4.62	.789	4.64	.727
Use profanity loud enough for athletes to hear	1.02	.136	1.00	.000	1.04	.270	1.01	.082
Distract athletes from focusing on the game	1.03	.176	1.07	.259	1.06	.255	1.06	.267
Sit or stand silently and clap only when an athlete (or the team) does something good	3.04	1.642	3.01	1.620	3.10	1.493	2.72	1.633
Yell something offensive to, or about, someone	1.05	.371	1.00	.000	1.06	.373	1.08	.446

*Note 1.* Each response above was prefaced with the stem “In this situation, how acceptable is it for fathers to:” See Appendix C for full survey.

*Note 2.* Responses were 1 = Never appropriate, 2 = Appropriate once in a while, 3 = Sometimes appropriate, 4 = Usually appropriate, 5 = Always appropriate

Table E73

*Hypothesis 6c: Analysis of Variance Results for Acceptability of Different Behaviors in Four Occurrences (Baseball, Fathers Only)*

Behaviors	df <sub>B</sub>	df <sub>W</sub>	F	p	t	df	<i>p</i> (one-tailed)	r
Yell at athletes on the field	3	621	.418	.740				
Act in a way that is embarrassing	3	618	.199	.897				
Act like a 'bad sport'	3	338.378	.763 <sup>a</sup>	.515				
Yell at the umpire	3	335.410	1.480 <sup>a</sup>	.220				
Yell at the coach(es)	3	331.208	.768 <sup>a</sup>	.513				
Verbally 'get into it'	3	320.457	2.538 <sup>a</sup>	.057				
Physically 'get into it' <sup>b</sup>	3	-	-	-				
'Coach' from the sidelines	3	338.817	4.851 <sup>a</sup>	.003*	-3.692	325.305	.000*	.20
Encourage athletes to 'play rough'	3	301.439	2.541 <sup>a</sup>	.057				
Encourage athletes to play outside the rules <sup>b</sup>	3	-	-	-				
Cheer for good play for both teams	3	620	.750	.522				
Cheer for athlete effort	3	341.583	.812 <sup>a</sup>	.488				
Use profanity loud enough for athletes to hear <sup>b</sup>	3	-	-	-				
Distract athletes from focusing on the game	3	334.637	1.021 <sup>a</sup>	.383				
Sit or stand silently and clap only when an athlete (or the team) does something good	3	341.875	1.679 <sup>a</sup>	.171				
Yell something offensive to, or about, someone <sup>b</sup>	3	-	-	-				

Note 1. <sup>a</sup> indicates Welch statistic was used because Levene's test was significant

Note 2. <sup>b</sup> indicates test could not be performed because at least one group has 0 variance

Note 3. \* indicates significance at  $p < .05$

Table E74

*Hypothesis 6c: Means and Standard Deviations for Acceptability of Different Behaviors in Four Occurrences (Ice Hockey, Mothers Only)*

Behaviors	Referee		Athlete		Coach		Parent	
	Incompetence		Unsportsmanlike		Incompetence		Unsportsmanlike	
	M	SD	M	SD	M	SD	M	SD
Yell at athletes on the ice	1.09	.394	1.12	.427	1.06	.273	1.05	.265
Act in a way that is embarrassing	1.10	.380	1.03	.169	1.05	.256	1.07	.297
Act like a ‘bad sport’	1.06	.310	1.01	.099	1.04	.195	1.05	.265
Yell at the referee	1.20	.519	1.20	.531	1.12	.403	1.06	.282
Yell at the coach(es)	1.06	.310	1.07	.253	1.05	.215	1.03	.227
Verbally ‘get into it’	1.05	.264	1.05	.217	1.05	.216	1.12	.505
Physically ‘get into it’	1.02	.191	1.00	.000	1.00	.000	1.00	.000
‘Coach’ from the sidelines	1.34	.694	1.39	.689	1.45	.787	1.35	.711
Encourage athletes to ‘play rough’	1.06	.364	1.09	.375	1.05	.259	1.06	.350
Encourage athletes to play outside the rules	1.03	.211	1.06	.416	1.01	.098	1.01	.102
Cheer for good play for both teams	4.47	.989	4.43	1.081	4.66	.722	4.47	.891
Cheer for athlete effort	4.57	.931	4.46	1.064	4.78	.574	4.65	.817
Use profanity loud enough for athletes to hear	1.04	.232	1.03	.221	1.02	.139	1.04	.200
Distract athletes from focusing on the game	1.03	.212	1.04	.241	1.00	.000	1.01	.102
Sit or stand silently and clap only when an athlete (or the team) does something good	3.55	1.578	3.60	1.606	3.17	1.653	3.47	1.634
Yell something offensive to, or about, someone	1.07	.324	1.09	.467	1.02	.139	1.06	.350

*Note 1.* Each response above was prefaced with the stem “In this situation, how acceptable is it for mothers to:” See Appendix D for full survey.

*Note 2.* Responses were 1 = Never appropriate, 2 = Appropriate once in a while, 3 = Sometimes appropriate, 4 = Usually appropriate, 5 = Always appropriate

Table E75

*Hypothesis 6c: Analysis of Variance Results for Acceptability of Different Behaviors in Four Occurrences (Ice Hockey, Mothers Only)*

Behaviors	df <sub>B</sub>	df <sub>W</sub>	F	p	t	df	<i>p</i> (one-tailed)	r
Yell at athletes on the ice	3	225.809	.726	.537				
Act in a way that is embarrassing	3	218.999	1.301	.275				
Act like a 'bad sport'	3	205.335	1.820	.145				
Yell at the referee	3	223.379	3.044	.030*	1.293	163.807	.099	
Yell at the coach(es)	3	410	.420	.739				
Verbally 'get into it'	3	219.560	.650	.583				
Physically 'get into it' <sup>b</sup>	3	-	-	-				
'Coach' from the sidelines	3	410	.487	.691				
Encourage athletes to 'play rough' <sup>b</sup>	3	407	.236	.871				
Encourage athletes to play outside the rules <sup>b</sup>	3	216.851	.629	.597				
Cheer for good play for both teams	3	224.998	1.683	.172				
Cheer for athlete effort	3	221.204	3.183	.025*	-.620	178.973	.268	
Use profanity loud enough for athletes to hear <sup>b</sup>	3	407	.218	.884				
Distract athletes from focusing on the game	3	-	-	-				
Sit or stand silently and clap only when an athlete (or the team) does something good	3	408	.763	.515				
Yell something offensive to, or about, someone	3	201.334	1.552	.202				

Note 1. <sup>a</sup> indicates Welch statistic was used because Levene's test was significant

Note 2. <sup>b</sup> indicates test could not be performed because at least one group has 0 variance

Note 3. \* indicates significance at  $p < .05$

Table E76

*Hypothesis 6c: Means and Standard Deviations for Acceptability of Different Behaviors in Four Occurrences (Ice Hockey, Fathers Only)*

Behaviors	Referee		Athlete		Coach		Parent	
	Incompetence		Unsportsmanlike Conduct		Incompetence		Unsportsmanlike Conduct	
	M	SD	M	SD	M	SD	M	SD
Yell at athletes on the ice	1.10	.404	1.14	.423	1.05	.256	1.03	.226
Act in a way that is embarrassing	1.10	.404	1.06	.235	1.04	.238	1.06	.282
Act like a ‘bad sport’	1.07	.349	1.04	.194	1.04	.239	1.04	.265
Yell at the referee	1.20	.553	1.20	.531	1.16	.459	1.07	.299
Yell at the coach(es)	1.09	.372	1.07	.253	1.07	.288	1.02	.204
Verbally ‘get into it’	1.08	.334	1.04	.241	1.07	.350	1.13	.533
Physically ‘get into it’	1.03	.212	1.02	.199	1.00	.000	1.00	.000
‘Coach’ from the sidelines	1.35	.683	1.51	.793	1.58	.889	1.35	.711
Encourage athletes to ‘play rough’	1.08	.335	1.12	.454	1.11	.439	1.06	.383
Encourage athletes to play outside the rules	1.05	.248	1.06	.418	1.03	.218	1.01	.102
Cheer for good play for both teams	4.53	.862	4.55	.971	4.60	.887	4.45	.913
Cheer for athlete effort	4.64	.784	4.58	.938	4.76	.602	4.66	.765
Use profanity loud enough for athletes to hear	1.05	.264	1.04	.239	1.04	.238	1.03	.174
Distract athletes from focusing on the game	1.05	.265	1.04	.241	1.00	.000	1.01	.102
Sit or stand silently and clap only when an athlete (or the team) does something good	3.49	1.555	3.71	1.506	3.13	1.667	3.50	1.648
Yell something offensive to, or about, someone	1.08	.385	1.14	.614	1.09	.464	1.13	.606

*Note 1.* Each response above was prefaced with the stem “In this situation, how acceptable is it for fathers to:” See Appendix D for full survey.

*Note 2.* Responses were 1 = Never appropriate, 2 = Appropriate once in a while, 3 = Sometimes appropriate, 4 = Usually appropriate, 5 = Always appropriate

Table E77

*Hypothesis 6c: Analysis of Variance Results for Acceptability of Different Behaviors in Four Occurrences (Ice Hockey, Fathers Only)*

Behaviors	df <sub>B</sub>	df <sub>W</sub>	F	p	t	df	<i>p</i> (one-tailed)	r
Yell at athletes on the ice	3	223.636	2.078	.104				
Act in a way that is embarrassing	3	225.868	.619	.603				
Act like a 'bad sport'	3	409	.402	.751				
Yell at the referee	3	223.187	2.484	.062				
Yell at the coach(es)	3	225.902	1.373	.252				
Verbally 'get into it'	3	218.732	1.014	.387				
Physically 'get into it' <sup>b</sup>	3	-	-	-				
'Coach' from the sidelines	3	224.817	2.134	.097				
Encourage athletes to 'play rough'	3	405	.362	.780				
Encourage athletes to play outside the rules <sup>b</sup>	3	410	.593	.620				
Cheer for good play for both teams	3	410	.426	.735				
Cheer for athlete effort	3	222.958	1.087	.355				
Use profanity loud enough for athletes to hear <sup>b</sup>	3	411	.184	.907				
Distract athletes from focusing on the game	3	-	-	-				
Sit or stand silently and clap only when an athlete (or the team) does something good	3	409	2.315	.075				
Yell something offensive to, or about, someone <sup>b</sup>	3	410	.344	.794				

Note 1. <sup>a</sup> indicates Welch statistic was used because Levene's test was significant

Note 2. <sup>b</sup> indicates test could not be performed because at least one group has 0 variance

Note 3. \* indicates significance at  $p < .05$