An Intervention to Address Youth Sport Parent Spectator Behaviors in Louisiana: Lessons for Future Research and Social Work Practice

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Abstract

Parent spectator behaviors present significant challenges within the youth sports environment. The role of parents in the youth sport experience is often overlooked, despite its documented importance to the family's youth sports experience. In order to better understand parental spectator behavior, a family systems approach guided an intervention study conducted within the state of Louisiana after a new law passed in 2019 to address these concerns. Using an adapted measurement version of the background anger instrument, results documented the role of education in addressing these concerns. The study prompts further examination of behaviors, in light of disparities between parent observations and their own personal behaviors. Implications for future intervention research on spectator behaviors and social work practice in the youth sport setting are highlighted.

Keywords Family dynamics in sport · Parent spectator behaviors · Parental role in sports · Parent education in youth sports

Youth sports have an important role in shaping family interactions and communication (Blom et al., 2013; Dorsch et al., 2015; Jeanfreau et al., 2020). The youth sports environment presents communication challenges, as there is continual communication, coordination, and maintenance of relationships among multiple adults and child athletes (Blom et al., 2013). Through spectator behaviors, parents seek to provide support and verbal feedback directed to the child athlete, coaches, referees, and at times, other spectators. Parents posit this feedback supports a positive youth sport experience, which can extend to advocating for fair play through expressing disagreement with events on the field of play.

Unfortunately, verbal exchanges can lead to more intense verbal or even at times, physical altercations between parents and other spectators. Limited quantitative information about the frequency and specificity of these behaviors exists (Block & Lesneskie, 2018), and most of the data collected to date is qualitative in nature (Dorsch et al., 2016; Blom & Drane, 2008; Goldstein & Iso-Ahola, 2008; Knight, 2019). Due to various factors, approximately 70% of youth are terminating participation in youth sports (Aspen Institute,

2015, 2019) and these numbers are expected to increase as a result of the COVID 19 pandemic. Addressing parent behaviors to promote a positive youth experience is a priority of US Youth Sports Strategy (HHS, 2019). Exploring the parent role as spectator is the function of this paper, especially as it relates to family functioning and policy initiatives to address these concerns.

Spectator behaviors reflect sport-based parenting practices on a global scale. Stefansen, Smette, & Strandbu (2018) ethnography noted intensive and “deep involvement” of parents compared to previous generations of youth sport participants in Norway. This includes a disparate alignment of parent and child goals for sport participation (Dorsch et al., 2015, Kanters, Bocarro, & Casper, 2008) and documented challenges within spectator behaviors abroad (Walters et al., 2016). Study of problems associated with spectator behaviors is complex, multifaceted, as it lacks both predictability and reliability (Block & Lesneskie, 2018).

There are limited data sets which document the nature of such behaviors to inform policy and decision makers. Incidents of inappropriate behavior are common, short lived, and rarely do parents face legal consequences for their actions (Fields et al., 2007; Walters et al., 2016). In 2019, the National Federation of High School Sports contended the challenge has reached epidemic proportions and supported by an overwhelming number of referees who are quitting

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due to parent behaviors. International sports settings struggle with addressing hooliganism and spectator violence is a fixture at sporting contests around the world (Spaaij, 2016). Understanding the nature of these challenges requires the gathering of more data to inform the design of interventions to better understand dynamics of spectator behaviors, which are important to shaping youth sports culture, both in the United States and internationally.

Spectator behaviors are important opportunities for parents to provide feedback. Optimal involvement of parents requires understanding and enhancement of the child's experience through shared and dually acknowledged goals which support both emotional well-being and require flexibility in parenting, especially as the athlete's age and level of competition changes (Hellstedt, 2005; Knight & Holt, 2014; Dorsch et al., 2017). Hyper critical parent spectator behaviors and high-performance expectations have been linked to burnout or a spectrum of conditions related to chronic stress resulting from activities such as overtraining and ceasing an activity that was once enjoyable (DiFiori et al., 2014). Holt et al. (2009) have suggested parents also must model behaviors that support autonomy and distinguish the role of parent and promote appropriate engagement in the sport system. Parents who model poor spectator behavior through screaming, fighting, and arguing with referees is linked to reduced enjoyment in sport (Logan & Huff, 2019). Negative spectator behaviors are shown to be a predictor of negative athletic behaviors of children (Arthur-Banning et al., 2009; Bean et al., 2014; Logan & Cuff, 2019).

Parents engage their children in sport with several goals in mind. Anticipated outcomes are the promotion of physical fitness, physical skills, social interaction, and the acquisition of transferrable life skills (Anderson-Butcher et al., 2012, 2016; Hedstrom & Gould, 2004; HHS, 2019). The family is viewed to be the strongest influence upon a youth's sports experience and continued participation (Hellstedt, 2005; Holt et al., 2008, 2009). The American youth sport system, with its high level of sophistication and organization requires much from parents. In addition to financial and in-kind contributions, parents are expected to provide emotional support and performance feedback (Côté & Hay, 2002; Harwood et al., 2019; Harwood & Knight, 2015; HHS, 2019). Shields et al. (2005) found approximately 13% of parents get angry with children about their performance. Parental involvement and over engagement in youth sports has replaced recreational and fun activities with an overly structured, competitive, and at times violent environment (Fields et al., 2007; Fiore, 2003; Frankl, 2007). Challenges associated with spectator behavior and violence have ignited a need for appropriate evidence-based intervention strategies (Dorsch et al., 2017; Fiore, 2003; Fields, Collins, & Comstock, 2010; Niehoff & Bonine, 2019). Efforts to address concerns about the youth sport domain are not new, dating back to the 1930s

(Frankl, 2007). The criminal justice struggles with appropriately addressing these behaviors, due to their sporadic and often result from unexpected circumstances occurring within a sports contest (Fields et al., 2007; Walters et al., 2016). Within the United States, there are 22 states with laws to address spectator behavior and most of these laws protect referees from undue harm (NASO, 2021). Recent legislation in Louisiana has created more expansive legal consequences for inappropriate spectator behaviors, and laws now protect all participants from verbal and physical harm.

Louisiana Context of Spectator Behavior Challenges

The passage of Act 355 in the 2019 Louisiana legislature spurred opportunities to examine spectator behaviors and the parental role in such activities. A myriad of public spectator incidents around the state prompted a stern warning from the National Federation of High School Sports during the winter of 2019, and catapulted swift legislative action (Niehoff & Bonine, 2019). The Act received support from both the Louisiana High School Athletic Association (LHSAA) and the Louisiana High School Officials Association (LHSA). Survey data from over 17,000 sports officials who identified parent behavior as a main reason for nearly 7 in 10 officials nationally quitting the job within three years (NASO, 2017) also shaped the necessity of examining spectator behaviors more closely.

Act 355, which was signed into law in 2019, expanded the scope of existing spectator laws. The statute applied to all sanctioned events (competitive and recreational) in the state and outlined consequences for verbal and physical abuse of all participants, both on and off the field. The law does not prohibit disagreement with officials, but disallows behaviors (both verbal and non-verbal) that could place a person at risk of harm or injury. The legislation obligates schools to and youth sports organizations enact additional safety protocols (LHSAA 2019a; LHSAA 2019b). Violators are subject to fines, jail time, and community service (LHSAA, 2019a; LHSAA, 2019b). This study provides an intervention framework to broadly examine and quantify both the frequency and nature of parent spectator behaviors in the context of this law.

Purpose of Present Study

The purpose of the present study was to better understand and quantify personal parent spectator behaviors and also those behaviors observed at youth sporting events. Previous studies, such as Omli and Lavoie (2009) documented the prevalence of observed spectator behaviors. With the advent

of new legislation in Louisiana, this study documents how participation in educational programming about laws related to spectator behavior influences parent spectator behavioral intent. Additionally, the study sought to test a brief educational intervention, which provided education about Act 355 in Louisiana and its influence upon the spectator behavior intent of parents upon learning about this law.

Literature Review

Several calls encouraged the expansion of intervention research concerning parents and youth sports (Harwood & Knight, 2015, 2016; Knight, 2019). However, this call is not without challenges. A small amount of research examines parents in systematic manner (Harwood & Knight, 2016). The author sought to answer this call by expanding intervention research directly involving parents. Specifically, the author sought to expand upon research evaluating how parent education influences parent behavior in the context of youth sports (Dorsch et al, 2017).

In the context of youth sports studies, Dorsch and colleagues (2020) have advocated for a more integrated understanding of the youth sport system. Because of the many players within this system (athletes, coaches, parents, referees, and spectators, as examples) and the influences of each of these upon the experience is complex, it is important to view these challenges through systematic lenses. Jeanfreau et al. (2020) contended a family systems approach is appropriate when attempting to understand elements contributing to behaviors within the family sport system, which in this case is spectator behaviors.

Educational Resources

There are minimal educational tools to guide parents regarding appropriate spectator behavior (Bach, 2006; Docheff & Conn, 2004; Dorsch et al., 2016) and limited resources to address these behaviors and measure their frequency (Omli & Lavoie, 2009; Omli & Wiese-Bjornstal, 2011). The establishment of behavioral expectations by sports organizations are common, yet evidence demonstrating whether they minimize poor spectator behavior is limited (Bach, 2006; Docheff & Conn, 2004; Livingston et al., 2016). Dorsch et al. (2017) pilot study demonstrated evidenced-based parent education programs have a positive impact on parent involvement, parent/child relationships, and promote positive participation outcomes. Lisinskiene and Lochbaum (2019) found a year-long intervention with a small cohort of children ages 5–6 had a positive impact upon child and parent relationships and supported effective parenting strategies.

Existing studies lack racial, ethnic, and socioeconomic diversity in parent research samples (Dorsch et al., 2017; Knight, 2019) and limited studies address how state-sponsored legislation impacts parent behavior on the sidelines and in the bleachers. One study found 76% of parents have reported feeling uncomfortable due to the spectator behaviors of others, 82% of parents believe they should be educated on the effect their behavior can have on youth sports, and 97% indicated youth sports organizations should outline consequences of inappropriate or unruly behavior (Bach, 2006). Harwood, Thrower, & Spray (2019) also used an online approach in their research on tennis parents in the UK. Notable findings from parents were self-reported improvements in ability to manage their emotions, expectations, and maintain healthy relationships in the youth sport environment amongst all stakeholders. While this program did not specifically focus upon spectator behaviors, it provides support for scholars to consider family systems thinking concerning the parent role in sport.

Family Systems Approach

In a family systems context, the youth sport parent whether initiating or witnessing inappropriate spectator behavior may not know how to approach such challenges. Parents should be aware of how these behaviors can disrupt family functioning and how to bring it back to equilibrium. Among the challenges for parents are balancing their child's performance expectations and increasingly, how to manage the behaviors of other parents whose spectator behaviors lack predictability and reliability (Wann, 2012; Block & Lesneskie, 2018). Parental actions can have damaging effects on the child (Omli & Lavoie, 2009; Jeanfreau, 2020).

A family systems approach is necessary to understanding the interactions of all of the individuals who influence the athlete's behavior (Stainback & Lamarche, 1998; Zimmerman & Protinsky, 1993). Bowen (1966) and Minuchin (1985) identified three assumptions driving this theoretical framework which are the recognition of co-dependency of members or holism, functioning in a circular manner, and seeking homeostasis (Minuchin, 1985, Dorsch et al., 2020). Barnhill (1975) (as cited in Barnhill, 1979) also reported families experience different areas of tension and challenges in seeking homeostasis and these are part of normal family functioning. Feedback loops resulting from spectator communications are unique in that they occur in a public setting and while likely intended just for the child athlete or teammates, they are often overheard by others who are not the direct receivers of the information.

An area of family tension related to spectator behavior concerns whether the communication between parent and child is distorted or accurately reflecting parental

intentions. Jeanfreau et al. (2020) advocated for family sport-based interactions to be evaluated in a larger context, especially when families enter as part of family entrée into therapeutic settings. Parent levels of involvement are also nuanced. Hellstedt (1987) characterized parent involvement in three general categories: overinvolved, moderately involved, and uninvolved. Overinvolved parents are heavily involved athletic careers of their children, often creating conflict with coaches, officials, and put much pressure on their child. Moderately involved parents engage children in the decision-making process concerning sports activities. Conversely, uninvolved parents exhibit apathy towards their child's sports experience and lack of investment, regardless of whether that is emotional, financial, or overall support. Dorsch et al. (2018) expanded this range of categories using a case study approach and suggested four categories of parents. Under involved parents lack attendance and support for their children, such as not providing adequate or appropriate equipment, are disrespectful of coaches, and lack both an emotional and physical presence for their children.

Appropriately, involved parents, as being emotionally and physically present, providing encouragement, act appropriately towards all participants, are helpful, and have realistic expectations of their child's involvement. Overinvolved parents are characterized by micromanaging their child's athletic activities, trying to tell the coach how to coach, and offering blind support in the form of money, resources, and social connections. These parents frequently live vicariously through their child. Extreme involvement is characterized by believing their child is the best athlete and focused largely only on outcomes such as an athletic scholarship and perfectionism. They too are vocal and often embarrass their children because of their behavior.

Background Anger

Block and Lesneskie (2018) reported family spectator behaviors are hard to quantify, due to their unpredictability and reliability. Goldstein & Iso-Ahola (2008) have equated parent spectator anger to road rage, lasting only a few minutes, and then subsiding. Blom and Drane (2008) contended there are gender-based differences in the nature of feedback provided to children. For example, during the course of youth sport games, there were more frequent and disparaging comments directed toward boys rather than girls. About 50% of comments were shown to be positive, and approximately one-third were negative. Omli and Lavoie (2009) provide a tool to quantify both the frequency and nature of parent spectator behaviors. Their research measured the frequency and nature of 10 specific behaviors that are verbal, non-verbal or physical interactions between two people that do not directly involve the observer, labeled background anger (BA). BA is appropriate in quantifying

spectator behavior and the self-reporting 5-point Likert scale allowed parents the opportunity to document both the nature of and frequency of their observations.

Consistent with Dorsch et al. (2020) advocating for integrated understandings of youth sport dynamics, BA occurs when children are present, yet are often unable to immediately respond to the spectator behavior, due to active participation in a youth sport event or game. BA is present when parents have an exchange with other adults stemming from a conflict over a call made by a referee or disagreement over a coach's decision or behavior. Omli and Lavoie (2009) targeted ten specific BA behaviors and developed a 10-item background anger scale to measure the prevalence of such behaviors among parents. Omli and Lavoie (2009) found the most commonly reported BA behaviors observed were coaching from the sidelines ($M=3.0$, $SD=0.99$) and yelling at referees ($M=2.4$, $SD=0.94$). Approximately 3.6% of parents believed coaching from the sidelines occurs all of the time (score of 5) and 27% of parents believed it occurred a lot of the time (score of 4). Yelling at referees at a score of 4 approximately 6% of the time.

Hypotheses, Aims and Objectives

Three key research questions addressed in the study were:

- R1: To what extent do educational interventions influence parent spectator behaviors?
- H1: Parents will not exhibit a change in spectator behaviors post-intervention
- R2: How might demographic variables influence parent spectator behaviors in Louisiana?
- H2: There will be no difference in spectator behaviors amongst grouping variables.
- R3: What spectator behaviors are parents observing on the sidelines and how do those vary from those in which they are personally participating?
- H3: There will be no difference in BA Personal and BA Observed scores

Method

Consistent with the need to develop more intervention-based tools (Dorsch et al., 2020; Jeanfreau, 2020; Knight, 2019) and more integrated understandings of parent behaviors in the youth sports domain, this exploratory study had a pre-experimental, one group pre-test/post-test intervention design. A digital survey and social media were used to recruit subjects and allowed participants to complete the survey at their discretion (Cleland et al., 2019). Using a Google Forms platform, participants were asked to document spectator behaviors at three points of measurement. The entire

data collection and educational intervention were completed in approximately 20–30 min. Upon receipt of the Google Forms link to complete the study, participants were asked to sign appropriate confidentiality agreements, as consistent with Human Subjects research protocols approved by the sponsoring institution.

Participants

The study had 106 total participants who completed the study, of which 104 were included in the final analysis. Eligible parents or other adult caregivers ages 18–64, with a child (ages 6–18) who had participated in a team sport in the past year. The age of parents, age of the child, and the sport were not collected. Past studies, such as Omli and Lavoie (2009) and Dorsch et al. (2017) had focused upon cohorts of parents and the intent of this study was to collect a broad sample before diving into specific sports and age group cohorts. The actual number of participants who attempted the survey was unknown, as the software did not document or save incomplete surveys.

Sampling Procedures

Social media played a large role in recruiting study participants. The author used snowball-sampling techniques, encouraging participants to forward the survey to other eligible participants through social media. The author posted information about the study on his own personal Facebook page and as previously mentioned the study was posted on the Facebook pages of several schools in South Louisiana and youth sport organizations in the Acadiana region.

Preparation and planning for the study began in May 2019 and data collection was completed in February 2020. The study emerged after a meeting with officials from the Louisiana High School Athletic Association to learn about spectator behaviors and Act 355. The LHSAA provided the author with a copy of the Act 355 legislation and LHSAA educational documents distributed to administrators in PDF format. The author suggested two approaches to the study. First, one LHSAA administrator informed the researcher that they were in the process of meeting with schools who were facing sanctions from the LHSAA as a result of spectator actions. If a school was interested, the LHSAA would notify the researcher of potential opportunities to develop an intervention program in hopes of minimizing future events. In July 2019, the author was informed there were no schools interested in such programming. While awaiting a decision from the LHSAA sanctioned schools, the author sought out permission to contact local schools in a medium sized school district in south Louisiana. The intent was to conduct “live” parent educational programming. The author received administrative permission to reach out to school principals,

but after several attempts, limited invitations were extended by schools to conduct in-person education. Several schools did allow the researcher in lieu of parent meetings to post information about the study on school Facebook pages, in school newsletters, and youth sports organizational websites. A link to the survey was also distributed to parents through digital school newsletters and the LHSAA webpage. Limited responses were received from two in-person events and thus eliminated these participants from being a potential comparison group. The author had success using online methods of data collection.

Sample Size, Power, and Precision

Based upon an a priori power analysis using GPower and parameters set at $\alpha = 0.05$, a small to medium effect size for paired samples t-test (0.2–0.5), a Cronbach alpha value of 0.80, consistent with standards of Tabachnick and Fidell (2014) and a two tailed analysis, the target sample size ranged from 33–199. The study had one hundred and six (106) participants and 104 were included in the data analysis. Two participants excluded from the analysis were collected at an in-person school setting, and excluded from the final analysis due to a lack of appropriate comparison group size.

Variables

Independent variables included were parent role, parent gender, family structure, race, ethnicity, family income, and knowledge of the law in advance of participating in the study. These variables were selected in response to the context of Act 355, and responded to the call to understand the interactions of variables in research on sport parents (Knight, 2019).

Demographic variables were collected after the completion of the intervention portion of the study and data was collected on a separate form within the survey instrument. 41.4% of participants ($n = 43$) reported being familiar with Act 355 in advance of study and 58.6% ($n = 61$) lacked familiarity. 75% ($n = 78$) of participants identified as cis-gender female, 25% ($n = 26$) identified as cisgender male. 96.2% ($n = 100$) identified as parents. 3.8% ($n = 4$) identified as either as grandparents, godparents, or caregivers. 99.1% ($n = 103$) of participants identified as Non-Hispanic or Latinx. Caucasian (primarily of European descent) constituted 73.6% ($n = 78$) of the sample, and the remainder identified African-American or Black 23.8% ($n = 23$) or Asian or Pacific Islander 2.8% ($n = 3$). In the analysis, these categories were reclassified as Caucasian (1) and Non-Caucasian (0) (Black and Asian or Pacific Islander). 76.9% ($n = 80$) of participants identified as married, 23.1% ($n = 24$) identified as single, divorced, non-married (in a domestic partnership)

or separated. These groups were reclassified in the analysis as non-married (1) married (2). Participants incomes at 0-\$24,999, 2.9% (n = 3), 14.2% (n = 14), \$25,000-\$49,999, 18.9% (n = 20) \$50,000-\$74,999, 17.9% (n = 19) \$75,000-\$99,999, and 45.2% (n = 47) reported a family income greater than \$100,000. To make the group sizes more equitable, the author condensed the first four income categories into one (labeled 1) and established a separate group for those within incomes over \$100,000 (labeled 2). Parental role and ethnicity were excluded from the group comparison analysis, due to limited number of members of comparison groups.

Measures and Survey Instrument

Spectator behaviors were measured through minor adaptations to Omli and Lavoï's (2009) background anger (BA) scale. Language of each survey item was modified slightly to focus upon whether participants perceived certain actions as demeaning. The original scale was used on a sample of 415 participants (177 cisgender males, 213 cisgender females, and 25 who did not disclose their gender) who identified as coaches, parents, and youth sports participants. Background anger was measured at three points in the study. Participants documented spectator observations (BA Observed), pre-test behaviors (BA Personal) and post-intervention (BA Intervention) and adapted for the context (observed, pre-intervention, post-intervention). Consistent with the original study, a five-point Likert scale of measurement was used for each survey item. Total scores in each BA category range from a low of 10 to a maximum of 50. The ten-item scale had a $\alpha = 0.87$ in previous research, which is consistent with acceptable reliability standards (Tabachnick & Fidell, 2007). In the current Cronbach's alpha analysis for each BA scale, which had 10 items (Observed ($\alpha = 0.88$); Personal, ($\alpha = 0.89$); Intervention($\alpha = 0.92$) revealed acceptable levels of reliability.

Data Collection

The Institutional Review Board at Louisiana State University approved all consent and survey documents in December 2019. After IRB approval, all consents, educational materials and survey items were placed in a secure and password protected Google Form document. A link to the study was distributed through social media channels and with permission of the sponsoring organizations was placed on youth sports and school Facebook pages throughout the state.

After appropriate consents were completed digitally, participants were asked to complete a 10-item inventory similar to Omli and Lavoï (2009) BA inventory and to document behaviors observed (BA Observed) over the past year as a youth sport spectator. Immediately upon completion

of this inventory, participants were next asked the same ten questions with slightly modified language to document their personal spectator behavior settings in the past year (BA Personal). Immediately upon completion of the BA Personal Inventory, participants were presented with a nine slide PowerPoint presentation which provided education about general challenges in the youth sport environment, related to drop-out, and state-specific challenges associated with spectator behavior, as documented in the NASO (2017) referee study. Additionally, three slides provided general education about Act 355.

Immediately upon review of the PowerPoint presentation, participants were given the opportunity to review the full piece of legislation in format. The third and final educational material parents had the opportunity to review was a summary of the legislation and appropriate talking points from the LHSAA. This same document, per LHSAA representatives was shared with members and school-based administrators and athletic directors to provide education about the legislation. This approach mirrored that of Harwood, Thrower, & Spray (2019) whose participants reported having these resources were important for parent reference. The intervention in total lasted less than an hour, consistent with recommendations of Dorsch et al. (2017).

Participants were not time bound in their ability to review the educational materials. Immediately upon completion of the review of the educational materials, parents were asked to complete a similar 10 item BA survey, and asked to document their behavioral intent (BA Intervention) as a result of learning about Act 355. After completing the BA Intervention survey, participants were asked to fill out demographic variables included in the survey. Upon completion of the demographic variables, the author and participant would receive a notice via email that they had completed the survey. To maintain and further support confidentiality, the only identifier directly connected to the participant was their preferred email address. No information concerning their names, or ages was collected.

Analytic Strategy

After reviewing all digital surveys, data was converted from Google Forms into an Excel file. Within the Excel file, the researcher was able to total the scores of individual items and generate a total BA score for each of the three points of measurement (BA Observed, BA Personal, and BA Intervention). and then loaded into SPSS v26 for analysis. To analyze the intervention, the author took the total self-reported BA Personal and BA Intervention scores and compared differences. Paired samples t-tests allowed for comparison of mean differences between BA Personal and BA Intervention scores. In order to examine group differences of BA Scores

among independent variables, ANOVA statistical techniques were utilized.

Because the variables were ordinal, paired sample t-test and repeated measures ANOVA techniques were used in examining variances in these groups and differences. Throughout the data collection period of December 2019–February 2020, the author was able to look at summary information from the survey automatically generated by the Google forms software and was reviewed almost daily to assess trends and for ways to identify a diverse pool of applicants and gaps in information.

Results

Background Anger Scores

BA Personal Scores had a mean of 14.63 ($SD=5.44$) total BA values ranged from 10–40. BA Intervention scores had a mean of 12.29 ($SD=4.56$), 95% CI [10, 22.5]. Values of BA Intervention ranged from 10–39. The educational intervention, which measured the change between BA Personal and BA Intervention scores yielded a mean decrease of 2.34 BA points ($SD=3.333$, $SE=0.324$), 95% CI [1.69, 2.99] and the two tailed paired samples t-test ($t=7.257$, $df=103$, $p<0.001$) was statistically significant. The paired samples test of the intervention (BA Personal–BA Intervention) generated a correlational value of 0.794, suggesting a medium–high correlation. The effect size, using *Cohen's d* was determined to be =0.70, suggesting a medium to large effect. Hypothesis 1 was not supported, as there was a statistically significant difference in BA scores as a result of the intervention. The intervention created statistically significant decreases in the means of nine of the ten BA Personal items, with the exception of the item, “Cussing loud enough for athletes to hear,” which did not see an increase in scores. The most frequent BA Personal behaviors noted were “Coaching from the sidelines” with a score of three or greater ($n=46$, 44.2%), “Yelling at referees” ($n=21$, 20.2%), and “Yelling at your own child” ($n=17$, 16.3%). The intervention also modified behavioral intent and the scores of 3 or higher concerning, “Coaching from the sidelines” ($n=13$, 12.5%), “Yelling at referees” ($n=6$, 5.7%), “Yelling at your own child” ($n=4$, 3.8%).

Non-Parametric Tests

Skewness and kurtosis values, along with reviewing the Shapiro–Wilk test of normality, revealed non-normal distribution of the intervention. The author employed the Wilcoxon Matched Pairs Signed Ranks test to look at this more closely. The standardized $T=-7.085$ and the test statistic was 124.00, $SE=199.940$ $p<0.001$). The sum of the ranked decreases

totalled 199.40 points. 73 participants had decreased BA scores (68.8%).

Demographic Variables

The second research question explored how BA Intervention scores were influenced by demographic variables. Demographic variables collected were annual income, gender identity, marital status knowledge of the law, and race. Repeated measures ANOVAs were chosen to analyze the relationship between variables. Results from the analysis is available in Table 1. Each of the demographic variables were compared with differences in the BA Personal–BA Intervention scores (main effect) and the interaction, and differences between groups. The main effect for each variable was statistically significant and Hypothesis 2 was not supported. The interaction between the pre-post (BA Personal–BA Intervention scores) and each demographic lacked statistical significance at the $\alpha=0.05$ across all variables. The between and within effects of each variable group was also examined and lacked statistical significance at the $\alpha=0.05$ level. Levene's test was conducted to assess the nature of these group variances and the only variable with statistically significant inequality of variances was race, as noted in Table 1.

Observed Behaviors

BA Observed results revealed a mean score of 23.78 ($SD=6.03$), revealing a large difference from BA Personal values ($M=14.62$, $SD=5.44$). Given this large difference, Hypothesis 3 was also not supported. 84% ($n=88$) of participants reported observing “Coaching from the sidelines” at a score of 3 or greater. 34.6% of participants ($n=36$) reported a score of 4 and 14.4% ($n=15$) reported a score of five for this behavior. For the variable “Yelling at referees (in a demeaning manner)” ($n=84$) or 78% reported a score of three or greater (Score of 4, $n=30$, Score of 5, $n=7$). Other variables which had large percentages of participants report a score of three or greater included “Acted in a way that was embarrassing” ($n=71$) or 68%, “Yelling at their own child (in a demeaning manner)” ($n=70$) or 67%, “Encouraging rough play” ($n=47$) or 45%.

Discussion

Interpretation of Results

This study makes important contributions to the literature. Findings highlight the nature of personal parent behaviors, their observations of other parents, and the role of educational interventions in influencing the intent of their spectator behaviors. As Block and Lesneskie (2018) explain,

Table 1 Repeated measures ANOVA—pre-post by variable

Demographic variable (n)	BA personal (<i>M</i> , <i>SD</i>)	BA intervention (<i>M</i> , <i>SD</i>)	F (1, 102) (α)	η^2
Total (All Variables)	14.63 (5.44)	12.29 (4.56)		
Male (25)	14.92 (4.73)	12.72 (3.29)		
Female (79)	14.53 (5.66)	12.15 (4.91)		
Total (104)				
Pre-Post			35.433 (< .001)	.258
Gender			.192 (.662)	.002
Interaction			.055 (.82)	.001
Non-Married (20)	14.70 (6.47)	11.85 (5.53)		
Married (84)	14.61 (5.22)	12.39 (4.33)		
Pre-Post			37.046 (< .001)	.266
Marital Status			.036 (.850)	.000
Interaction			.584 (.447)	.006
Caucasian (78)	14.04 (6.47)	11.94 (4.12)		
Non-Caucasian (26)	16.38 (8.07)	13.35 (7.573)		
** Pre-Post			46.516 (< .001)	.313
**Race/Ethnicity			3.135 (.08)	.03
**Interaction			1.542 (.217)	.015
Familiar-Law, No (61)	14.33 (5.70)	12.02 (4.98)		
Familiar-Law (43)	15.05 (5.07)	12.67 (3.93)		
Pre-Post			49.193 (< .001)	.325
Familiar-Law			.531 (.468)	.005
Interaction			.009 (.928)	.000
Income < \$74,999 (57)	15.28 (6.43)	12.74 (5.81)		
Income > \$74,999 (47)	13.83 (3.82)	11.74(2.22)		
Pre-Post			49.308 (< .001)	.326
Income			1.728 (.192)	.017
Interaction			.484 (.488)	.005

Sphericity Assumed, *Error Variances statistically significant

documenting the nature of spectator behaviors of parents is a challenge and limited studies have documented the nature of spectator behaviors. This study documents parent spectator behaviors in three ways. This research affirms previous research from Omli and Lavoie (2009) concerning frequent behaviors of parents and suggests that BA is more frequently observed in spectator behaviors than reported in past studies. Behaviors such as coaching from the sidelines and yelling at referees have increased over time. With Omli and Lavoie's (2009) study as a baseline, it appears that coaching from the sidelines and yelling at referees are the most commonly observed spectator behaviors in these samples. context. Also noted was an increase in presence of behavior that was perceived by spectators to be embarrassing, witnessing parents yelling at their own children, and the encouragement of rough play. While BA scores were not directly linked to classified forms of parenting as outlined by Hellstedt (1987) and Dorsch et al. (2018), BA scores in future research could be correlated with sport parent archetypes. Additionally, this study lends support to parent engagement in online-based

education programs similar to Harwood, Thrower, and Spray (2019).

Intervention Intent

The brief educational intervention demonstrated parents have intentions to modify their spectator behaviors when presented with educational materials about spectator behavior laws. Amongst study participants, 68% ($n = 71$) saw decreases in BA because of the intervention. Only 4.7% ($n = 5$) saw increases in BA and the remainder of the sample ($n = 28$, 26.4%) saw no changes in scores. The current study found no statistically significant differences in all BA scores when accounting for gender, contradicting the findings of Walters et al. (2016) and Blom and Drane (2008) who found gender differences in both the frequency and feedback to participants. Marital status, race, and knowledge of the law were also not shown to be statistically significant variables in group BA differences. Future research should further explore these nuances in order to better understand how

demographics shape parent behaviors and how behavioral intention translates into actual spectator behaviors. Adaptations of the Omli and Lavoie (2009) BA instrument used in each of these contexts proved to be a reliable instrument to capture data in each measurement of background anger and further evaluation through future research.

Family Systems Perspective

In addition to providing more information about spectator behaviors, it is important to examine this study through a family systems lens. This research suggests there has been an increase in BA behaviors since the Omli and Lavoie (2009) study was conducted. The study sample established that coaching from the sidelines, yelling at referees, yelling at child participants, and actions that are considered embarrassing, and to a lesser extent the encouragement of rough play are common behaviors both observed and personal behaviors of parents in the youth sports domain. This study illustrates that within the youth sport domain parents are actively participating in such activities, but not necessarily in violent activities. The increase in BA observations could also suggest that within families, there is “deep involvement” (Stefansen, Smette, & Strandbu, 2018) reflected in the BA activities of parents. One of the most notable findings of this study is a large difference in BA Observed and BA Personal.

This suggests that within a family system, parents may be attuned to the actions of others, but may lack awareness of their own behaviors. This may also suggest that within the family system, parents may or may not believe their personal spectator behaviors can disrupt the youth sport experience and they may not realize the impact of their actions upon the family system in the context of youth sports. These results also lend support to Jeanfreau et al. (2020) recommendation that sport-based behaviors could reflect larger challenges within the family system, including the parental level of involvement in child’s sports activities. This should prompt social workers and other professionals to ask questions about the nature of sport involvement, especially when parents present for therapeutic interventions.

Communication

Spectator behavior is both a family-based and public form of communication. The intervention portion of this study prompted parents to consider how they communicate their thoughts and emotions during sports contests to their children, coaches, referees, and other spectators. The spectator challenges of parents stretch across gender, income, marital status and race, with minimal differences. The study also provided insight into characteristics of the youth sport spectator communication feedback loop. It appears through

coaching on the sidelines and yelling at referees that parents are attempting to override the role of other adult coaches in these settings. Additionally, through disagreement with referees, the parent is disrupting the communication from within the game to athlete participants. The frequency at which parents are yelling at referees may imply that parents are attempting to override authoritative figures who are trained to enforce the rules of the game.

Through this very brief intervention framework, perhaps parents were able to briefly reflect upon how spectator behavior can create conflicting messages for their children, or the values shared publicly through their actions. Parents may need to be equipped with evidence-based research to guide their private (family-based) and public (spectator) interactions. These findings could also be compared to typologies of parents as described Holt et al. (2009) and perhaps BA behaviors can be linked to associated parenting practices. Future research should consider merging quantitative measures and qualitative descriptors to better inform family system functions and larger goals of promoting better understanding of the youth sport system as outlined by Dorsch et al. (2020).

Limitations

Challenges with Methodology

The online approach had some strengths and exposed potential limitations. The author was able to collect data in a cost-effective and timely manner through social media. While snowball sampling was a primary method to recruit participants, it is difficult to understand factors that may have influenced the validity of the study. As an example, it is unknown whether there was communication about the survey amongst participants, either in person or through social media outlets that could have impacted results. On several occasions, snowball sampling seemed to be very effective in the recruitment of participants, yet, the software did not track how much time the participant spent completing the study, thus difficult to gauge how many participants attempted the survey and did not complete participation in the study. The researcher was not alerted to any concerns related to the survey instrument during the research process. The author did not track the source of the individual or group who encouraged them to complete the study and the specific youth sport context, whether it was a recreational, travel, or school-based setting. Given the documented spectator challenges as documented by referees in the NASO (2017) relative to context (ie. High school, travel, recreational, as examples), future studies could benefit from studying these issues in a narrower context or environment. The setting may have an important influence upon behaviors.

Intervention Design

The design of this intervention program evaluated intended spectating behaviors immediately upon completion of the educational intervention. Previous research involving educational interventions related to parent behavior involved more longitudinal designs and demonstrated the 1-h threshold was appropriate (Dorsch et al., 2017). While this design has not been used in similar studies to date, unbeknownst to the research at the time of the study, the likelihood of attrition would have potentially increased significantly, due to the advent of the COVID-19 in March 2020. Data collection for this study was completed in February 2020 and environmental factors such as the shutting down of youth sports organizations in the spring of 2020 may have skewed results or impacted the level of spectator engagement. The current design allowed for the researcher to look at their intended spectator behaviors and focus upon a brief intervention, with a previously used instrument.

Geography

This study was conducted in the context of changes in spectator laws specific to the state of Louisiana. A broader sample collected from both within and outside of the state may have yielded more diverse findings, had it been conducted in other parts of the United States or internationally. While the study drew participants from all over the state of the Louisiana, local geography, i.e. details about where the participant lived (i.e. rural, urban, or suburban community) was not collected. Details about the survey were shared with schools in one district in south Louisiana and a school principal informed the author some areas of his school zone lacked internet access and this may have inhibited diverse participants throughout the state.

Limited Exposure

Nearly 60% of participants were unaware of Act 355 in advance of the study and there was limited coverage in the media about cases where the law was applied. Near the end of the data collection period, the author was informed of a local case tried under Act 355 in the target that had little to no media coverage. The case was tried in a city court and treated similar to a traffic ticket proceeding. This prompts questions concerning the nature of this law, its intent, and its potential role to limit, modify, or promote change of youth sport parent spectator behaviors.

Future Directions and Opportunities for Social Work

Addressing parent spectator behaviors should be an area of great importance for social workers to consider in their clinical and scholarly work. Jeanfreau and colleagues (2020) contend that sport-based behaviors can provide insight into broader family dynamics. Future use of this research design could prompt further examination of parent behaviors within the family system and how they translate to other family challenges. Clinicians should explore the dynamics associated with sports participation and how the role it serves in their lives as a parent and as a source of family engagement. Additionally, BA tools used in this study can be used to examine communication and feedback loops and the reasons for parent spectator behavior. The Omli and Lavoie (2009) instrument could be a vehicle in collecting more data to inform and potentially policy-based responses to the complex challenges associated with spectator behaviors.

Using a brief educational intervention framework, this research has answered an important call to address a problem which is frequently encountered by parents. In light of COVID-19 it is expected the dynamics of spectator behaviors will continue to change, especially as laws governing behaviors and safety protocols are passed. Further collection of parent spectator data could potentially translate into data to drive future interventions. Data collected will also aid policy and decision makers on how to structure educational programs to address specific behaviors and their impact upon the youth sport organization, participating families, and individual athletes. Furthermore, this study prompts practitioners to look at sport-based behaviors as potential avenue to explore the functions of a family system. This is important when a family is seeking therapeutic consultation to improve its functioning. Spectator behaviors should enhance, rather than detract from positive family functioning and reinforce the benefits of youth sports participation. Additionally, educational programs and policy decisions should be data driven and this study lends support to this premise.

Declarations

Conflict of interest The author has no known conflicts of interest to disclose.

References

- Anderson-Butcher, D., Riley, A., Iachini, A., Wade-Mdivanian, R., & Davis, J. (2012). Sports and youth development. In R. J. R.

- Levesque (Ed.), *Encyclopedia of adolescence*. (pp. 2846–2859). Springer.
- Anderson-Butcher, D., Riley, A., Iachini, A., Wade-Mdivanian, R., Davis, J., & Reynolds, J.F. (2016). Sports and youth development. In R.J.R. Levesque (Ed), *Encyclopedia of adolescence* (2nd ed). New York: Springer. Retrieved from: https://www.researchgate.net/profile/Dawn-Anderson-Butcher/publication/305152934_Sport_and_Youth_Development/links/5af6e112aca2720af9c793cd/Sport-and-Youth-Development.pdf
- Aspen Institute. (2019). *Don't retire, kid*. Retrieved from <https://www.aspenprojectplay.org/dontretirekid-faq>
- Aspen Institute. (2015). *Sports for all, play for life: A playbook to get every kid in the game*. Retrieved from <http://youthreport.aspenprojectplay.us/>
- Bach, G. (2006). The parent's association for youth sports: A proactive method of spectator behavior management. *Journal of Physical Education, Recreation & Dance*, 77(6), 16–19
- Block, S., & Lesneskie, E. (2018). A thematic analysis of spectator violence at sporting events in North America. *Deviant Behavior*, 39(9), 1140–1152.
- Blom, L. C., Vissek, A. J., & Harris, B. S. (2013). Triangulation in youth sports: Healthy partnerships among parents, coaches, and practitioners. *Journal of Sports Psychology in Action*, 4(2), 86–96
- Blom, L. C., & Drane, D. (2008). Parents' sideline comments: Exploring the reality of a growing issue. *Athletic Insight: the Online Journal of Sports Psychology*, 10(3), 1–25
- Côté, J., & Hay, J. (2002). Family influences on youth sports performance and participation. In J. M. Silva & D. Stevens (Eds.), *Psychological foundations of sports* (pp. 503–519). Allyn & Bacon.
- DiFiori, J. P., Benjamin, H. J., Brenner, J. S., Gregory, A., Jayanthi, N., Landry, G. L., & Luke, A. (2014). Overuse injuries and burnout in youth sports: a position statement from the American Medical Society for Sports Medicine. *British Journal of Sports Medicine*, 48(4), 287–288. 103–129.
- Docheff, D. M., & Conn, J. H. (2004). It's no longer a spectator sport—eight ways to get involved and help fight parental violence in youth sports. *Parks & Recreation*, 39(3), 62–70
- Dorsch, T. E., Smith, A. L., Blazo, J. A., Coakley, J., Côté, J., Wagstaff, C. R., & King, M. Q. (2020). Toward an integrated understanding of the youth sport system. *Research Quarterly for Exercise and Sport*, 1–15.
- Dorsch, T. E., King, M. Q., Tulane, S., Osai, K. V., Dunn, C. R., & Carlsen, C. P. (2018). Parent education in youth sports: A community case study of parents, coaches, and administrators. *Journal of Applied Sports Psychology*, 1–24.
- Dorsch, T. E., Smith, A. L., & Dotterer, A. M. (2016). Individual, relationship, and context factors associated with parent support and pressure in organized youth sports. *Psychology of Sports and Exercise*, 23, 132–141
- Dorsch, T. E., Smith, A. L., Wilson, S. R., & McDonough, M. H. (2015). Parent goals and verbal sideline behavior in organized youth sports. *Sports, Exercise, and Performance Psychology*, 4(1), 19–36
- Dorsch, T. E., King, M. Q., Dunn, C. R., Osai, K. V., & Tulane, S. (2017). The impact of evidence-based parent education in organized youth sports: A pilot study. *Journal of Applied Sports Psychology*, 29(2), 199–214. <https://doi.org/10.1080/10413200.2016.1194909>
- 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), 359–369
- Fiore, D. K. (2003). Parental rage and violence in youth sports: How can we prevent soccer moms and hockey dads from interfering in youth sports and causing games to end in fistfights rather than handshakes. *Villanova. Sports & Entertainment Law Journal*, 10(1), 103–129
- Frankl. (2007). *Youth sports: innocence lost*. Retrieved from: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.527.3618&rep=rep1&type=pdf>
- 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.
- Harwood, C. G., Knight, C. J., Thrower, S. N., & Berrow, S. R. (2019). Advancing the study of parental involvement to optimise the psychosocial development and experiences of young athletes. *Psychology of Sports and Exercise*, 42, 66–73
- Harwood, C. G., & Knight, C. J. (2015). Parenting in youth sports: A position paper on parenting expertise. *Psychology of Sports and Exercise*, 16, 24–35
- Harwood, C. G., & Knight, C. J. (2016). Parenting in sports. *Sports, Exercise, and Performance Psychology*, 5(2), 84–88
- Health and Human Services Administration (HHS). (2019). *The National Youth Sports Strategy*. Retrieved from: https://health.gov/sites/default/files/2019-10/National_Youth_Sports_Strategy.pdf
- Hedstrom, R., & Gould, D. (2004). Research in youth sports: Critical issues status, white paper summaries of existing literature. Retrieved from <https://www.philomath-youth-activities-club.org/app/download/7099351604/CriticalIssuesYouthSports.pdf>
- Hellstedt, J. (2005). Invisible players: A family systems model. *Clinics in Sports Medicine*, 24(4), 899–928. <https://doi.org/10.1016/j.csm.2005.06.001>
- Holt, N. L., Tamminen, K. A., Black, D. E., Sehn, Z. L., & Wall, M. P. (2008). Parental involvement in competitive youth sports settings. *Psychology of Sports and Exercise*, 9(5), 663–685
- Holt, N. L., Tamminen, K. A., Black, D. E., Mandingo, J. L., & Fox, K. R. (2009). Youth sports parenting styles and practices. *Journal of Sports and Exercise Psychology*, 31(1), 37–59
- Hurley, D., Swann, C., Allen, M. S., Okely, A. D., & Vella, S. A. (2017). The role of community sports clubs in adolescent mental health: The perspectives of adolescent males' parents. *Qualitative Research in Sport, Exercise and Health*, 9(3), 372–388
- Jeanfreau, M. M., Holden, C. L., & Esplin, J. A. (2020). How far is too far? Parenting behaviors in youth sports. *The American Journal of Family Therapy*, 48(4), 356–368
- Kanters, M. A., Bocarro, J., & Casper, J. (2008). Supported or pressured? An examination of agreement among parents and children on parent's role in youth sports. *Journal of Sport Behavior*, 31(1), 64–80.
- Knight, C. J. (2019). Revealing findings in youth sports parenting research. *Kinesiology Review*, 8(3), 252–259
- Knight, C. J., & Holt, N. L. (2014). Parenting in youth tennis: Understanding and enhancing children's experiences. *Psychology of Sport and Exercise*, 15(2), 155–164.
- Livingston, J., Schmidt, C., & Lehman, S. (2016). Competitive club soccer: Parents' assessments of children's early and later sports specialization. *Journal of Sport Behavior*, 39(3), 301–316.
- Lisinskiene, A., & Lochbaum, M. (2019). A qualitative study examining parental involvement in youth sports over a one-year intervention program. *International Journal of Environmental Research and Public Health*, 16(19), 3563
- Logan, K., & Cuff, S. (2019). Organized sports for children, preadolescents, and adolescents. *Pediatrics*, 143(6), 1–20
- Louisiana High School Athletic Association (LHSAA). (2019a). *Louisiana act no.355 harassment of contest officials, coaches, administrators, and staff*. LHSAA.
- Louisiana High School Athletic Association (LHSAA). (2019b). *Act 355 also known as HB 184 harassment of officials in louisiana talk points*. LHSAA.
- Niehoff, K., & Bonine, E. (2019). Dear mom and dad...cool it! *Crescent City Sports*. Retrieved from <https://crescentcitysports.com/dear-mom-and-dad-cool-it/>

- Omli, J., & LaVoi, N. M. (2009). Background anger in youth sports: A perfect storm? *Journal of Sports Behavior*, 32(2), 242–260
- Omli, J., & Wiese-Bjornstal, D. M. (2011). Kids speak: Preferred parental behavior at youth sports events. *Research Quarterly for Exercise and Sports*, 82(4), 702–711
- Shields, D., Bredemeier, B. L., LaVoi, N. M., & Power, F. C. (2005). The sports behaviour of youth, parents and coaches. *Journal of Research in Character Education*, 3(1), 43–59
- Spaaij, R. (2016). Terrorism and security at the Olympics: Empirical trends and evolving research agendas. *The International Journal of the History of Sport*, 33(4), 451–468
- Stainback, R. D., & Lamarche, J. A. (1998). Family systems issues affecting athletic performance in youth. *The Psychotherapy Patient*, 10(3–4), 5–20
- Stefansen, K., Smette, I., & Strandbu, Å. (2018). Understanding the increase in parents' involvement in organized youth sports. *Sport, Education and Society*, 23(2), 162–172.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics*. Allyn & Bacon/Pearson Education.
- Thrower, S. N., Harwood, C. G., & Spray, C. M. (2019). Educating and supporting tennis parents using web-based delivery methods: A novel online education program. *Journal of Applied Sport Psychology*, 31(3), 303–323
- Wann, D. L. (2012, June). *Parental involvement in youth sport: Examining appropriate and inappropriate coaching and spectating behaviors*. [Invited address]. Portland, ME: Sport Psychology Institute.
- Walters, S., Schluter, P., Stamp, D., Thomson, R., & Payne, D. (2016). Coaches and referees' perspectives of sideline behaviour in children's team sports: a cross-sectional study. *International Journal of Sport Management, Recreation, & Tourism*. 23(1), 51–74. <https://doi.org/10.5199/ijsmart-1791-874X-23c>
- Zimmerman, T. S., & Protinsky, H. (1993). Uncommon sports psychology: Consultation using family therapy theory and techniques. *American Journal of Family Therapy*, 21(2), 161–174.

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