JOURNAL OF AMATEUR SPORT

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Welcome to the Journal of Amateur Sport

We hope you enjoy the second issue of the Journal of Amateur Sport (JAS)! We are quite excited by the wide-range of articles in the issue and believe there is "something" for everyone in the pages that follow. In the coming months, we will release our first special issue guest edited by Drs. Kyle Bunds and Joshua Newman. Please keep an eye out for the release of that issue in early 2016 and the third standard issue of JAS in the spring of 2016. Thanks a ton for reading and I hope you find value in the excellent articles that comprise this issue.

Jordan Bass, Ph.D., University of Kansas
Co-Editor and Founder of JAS

Mission and Purpose

The overarching mission of the Journal of Amateur Sport (JAS) is to provide scholars an outlet in which to share scholarship relevant to the amateur sports realm. We define amateur sport as those who participate and govern at the youth, recreational, community, international, and intercollegiate level. We acknowledge the tenuous debate surrounding the amateurism of intercollegiate athletics, thus at this time we welcome examinations that are focused on the less commercialized avenues of college sport participation and governance (especially NCAA Division II, III, and other less publicized governing bodies and settings). Submissions from all disciplines are encouraged, including sociology, communication, and organizational behavior. Similarly, we welcome a wide array of methodological and structural approaches, including conceptual frameworks, narratives, surveys, interviews, and ethnographies.

As an open-access journal, submissions should be of interest to researchers and practitioners alike. In all, the content published in JAS should advance the collective understanding of the participants, coaches, administrators, and/or institutional structures that comprise amateur sports worldwide. We challenge authors to submit creative and nontraditional manuscripts that are still high-quality in nature. Authors

are encouraged to email the editors before submitting if they are unsure if their manuscript is a proper fit within JAS.

Call for Papers

Thank you for considering the Journal of Amateur Sport (JAS) for your scholarly work. Please follow the guidelines laid out below when submitting your manuscript to JAS. Visit http://www.jamsport.org and click "Submit Now" to begin the submission process. To aid in the double-blind review process, please include three separate files: (1) a title page with corresponding author information, (2) an abstract of no more than 500 words with no identifying information, and (3) the full manuscript with no identifying information. The manuscript should not have been simultaneously submitted for publication or been published previously. Manuscripts should follow the current *Publication Manual of the American Psychological Association* with exception to the elements noted below. The document must be double-spaced, in Garamond font, size 14, and utilize one inch margins throughout. Maximum length, including references and figures, is 50 pages. Be sure to include a running header, page numbers, and footnotes (when appropriate). Authors are responsible for receiving permission to reproduce copyrighted material before submitting their manuscript for publication.

There is no charge for submission or publication. Authors will be provided with a free digital and print copy of published articles. JAS is an open-access, online journal and thus strongly encourages the posting and sharing of published articles by authors on their personal and departmental websites, Google Scholar, and e-portfolios *once they are posted to the JAS website*. Authors should expect a maximum 60-day turnaround time from initial submission to receiving the initial review. Submissions that are determined to be outside of the scope or not appropriate for JAS are subject to desk rejection. If an article is deemed fit for publication, the author(s) must sign a publishing agreement before the article is officially accepted. Submissions will be subjected to a double-blind review from at least two members of the editorial board (or outside reviewers when appropriate).

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Foreword to the Issue

George H. Sage

George H. Sage is Professor Emeritus of Sociology and Kinesiology at the University of Northern Colorado. He has published more than fifty articles and is the author of many books, including *Globalizing Sport: How Corporations, Media, and Politics Are Changing Sports* (Paradigm 2010). He was inducted into the National Association for Sport and Physical Education Hall of Fame in 2006. He is the past president of the North American Society for the Sociology of Sport.

At last! At last—a journal with a specific focus on amateur sport. It couldn't come at a more opportune time, as the commercialized sports industry becomes more and more the focal point of the mass media and popular and scholarly publications. Such attention conveys an impression that business-related sports have the most athletes and coaches and are the most popular. However, the reality is that the overwhelming number of athletes and coaches—male and female—are amateurs, and if you count the friends and family who come to watch amateur sports events, they unquestionably outnumber spectators at professional sporting events. In this Foreword I want to illustrate the enormous scope of amateur sport to support what I've said above about the extent of amateur sports and the importance of the *Journal of Amateur Sport.*

Research by the Sports & Fitness Industry Association found that nearly 80 percent of Americans are involved in some type of sports activity or recreational endeavor, with some 34 million active on a "regular basis." Youth sports programs are organized by more than twenty-five agencies and by thousands of local and regional sports organizations. The National Council of Youth Sports estimates that more than 60

million boys and girls participate in organized youth sports throughout the United States; some 5 million Canadian youth participate. Consequently, there is a bewildering variety of sports for almost every child who has an interest in being involved in sports. To take just two examples, Little League baseball is the largest of the youth sports organizations, with leagues in every U.S. state and in eighty countries with over 160,000 teams. Soccer is a global sport and is played by hundreds of millions of youth worldwide. It has been growing faster than any other youth team sport in the U.S. and there are now some 6,000 youth soccer clubs and about 3.2 million young boys and girls playing the sport.

Nearly 3,000 YMCAs in North America provide some 8 million boys and girls the opportunity to participate in organized sports. The Amateur Athletic Union (AAU), a non-profit volunteer sports organization, is dedicated exclusively to the promotion and development of amateur sports. It has over 670,000 participants and 100,000 annual volunteers nationwide and sanctions 34 sports programs in the AAU Districts. More than 2,000 local, state, regional, and national events in twenty-one different sports are sponsored by the AAU Junior Olympics Sports Program.

Interscholastic sports are extremely popular in high schools of the United States, and increasingly in Canadian secondary schools. In 2015 about 7.8 million boys and girls in the United States were involved in more than thirty-five different sports at the high school level. For twenty-five consecutive years the number of student participants in high school sports has increased.

In colleges and universities, the intramural sports program (called recreation sports on some campuses) is the place where more student-athletes participate in sports than anyplace else on college campuses. In the U.S. the National Intramural and Recreational Sports Association (NIRSA) regulates recreation sports throughout higher education; it serves college students who play at the intramural and club level in sports, but do not participate in NCAA or NAIA sports programs. The NIRSA membership serves an estimated 8.1 million students annually. The number of athletes on commercialized intercollegiate sports teams is miniscule—typically less than 10 percent—compared to the number of intramural athletes nationwide.

Seniors—age 65 and over—are the fastest growing segment of global populations. By 2030 more than 20 percent of U.S. residents are projected to be over 65, compared with 13 percent in 2015. Older adults are remaining physically active and embracing sporting lifestyles. The organizations they choose to join to continue playing sports vary from local community recreation programs to the National Senior Games

Association, a nonprofit organization dedicated to motivating senior men and women to lead a healthy lifestyle through continued sports involvement. Globally, the Masters Sports Tournaments and the Senior Olympics are major forces in organizing competitive sports for senior men and women. Over 250,000 senior athletes participate in these senior games competitions each year.

These are only the most visible programs for seniors. In addition, retirement communities are typically built to encourage the sports interests of their residents. Many community recreation departments have thriving programs involving senior leagues in a variety of sports. In all likelihood, participant sports will be a major growth industry wherever large groups of older persons settle.

The nonprofit National Sports Center for the Disabled (NSCD) is one of the most effective organizations supporting and promoting sports for people with disabilities. Currently, participants come to the NSCD from all fifty states and from countries all over the world. Participants can choose among twenty different winter and summer sports, from skiing and snowshoeing to river rafting and rock climbing. The NSCD Competition Program is the largest of its kind in North America; it has been successful at attracting and training some of the best ski racers with disabilities and placing them on the U.S. Disabled Ski Team. Twelve of the NSCD'S sponsored thirty-four athletes who competed in the Winter Paralympic games in Sochi brought home fifteen medals in their perspective sport.

The needs of the disabled are also serviced by Disabled Sports USA, which was founded by disabled Vietnam veterans. It offers nationwide sports rehabilitation programs to anyone with a permanent disability. Activities include winter skiing, water sports, summer and winter competitions, and fitness and special sports events. Participants include those with visual impairments, amputations, spinal cord injury, multiple sclerosis, head injury, cerebral palsy, and other neuromuscular and orthopedic conditions. As a member of the USOC, Disabled Sports USA sanctions and conducts competitions and training camps to prepare and select athletes to represent the United States at the Summer and Winter Paralympic Games.

I hope these examples—and they are only examples—of the multiplicity of types and forms of amateur sport confirm the need for a journal that is specifically dedicated to amateur sport.

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Sport and Family Functioning: Strengthening Elite Sport Families

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Families play an important role in society, both in human sustenance and individual development. Family systems theory views the family as a series of interconnected parts that when functioning properly, provide individual members with multiple benefits. Interaction with external systems, such as sport, school or church, can have positive and negative impacts on the family. It is unclear, however, what elements of sport relate to specific outcomes. The purpose of this study is to better understand the relationship between elite youth sport participation and family units, and how these two spheres, individually and in combination, impact family functioning. In-depth, purposeful interviews with seven "sport families" revealed that in addition to the depletion of resources (financial and time), elite sport engagement strongly detracts from the marital dyad and family unit receiving sufficient time and attention for proper functioning. The results also offer insight into how the leagues can be better managed such that they positively contribute to family functioning. Specifically, the results indicate that leagues can aid in strengthening family functioning through allowing families to have *coaching input,* and providing greater attention to *scheduling, league expectations,* and *instrumental support*.

Families play a vital role in our society by providing members with a means of financial, social, and emotional support as well as personal development (Bebiroglu, Geldhof, Pinderhughes, Phelps, & Lerner, 2013; Lavee, McCubbin & Olsen, 1987; Minuchin, 1985). Researchers and practitioners continue to find ways to enhance family functioning on the basis that more functional families lead to greater

well-being for family members and ultimately to a healthier and more stable society (Freistadt & Strohschein, 2012). One avenue that has often been proposed for families to achieve greater functioning is to play or recreate together.

Family scholars have established that there is a positive relationship between family leisure activities and positive family outcomes (e.g., Orthner & Mancini, 1991; Zabriskie & McCormick, 2001). For example, in a 5-year longitudinal study, Hill (1988) found a significant relationship between shared leisure time and lower divorce and separation rates. Zabriskie and McCormick (2001) found that different types of family leisure activities have the ability to strengthen the bonds within a family and allow the family to become better at adapting to new situations. The leisure context provides a safe environment to enhance communication and adaptability, and shared activities can increase bonding within the family and enhance overall family cohesion (Orthner & Mancini, 1991).

Current trends indicate that one leisure context in which an increasing number of families are interacting with is youth sport (Dorsch, Smith, & McDonough, 2009; Lally & Kerr, 2008; Warner, Dixon, & Leierer, 2015). Youth sport provides a context in which many positive outcomes may occur for the child participant (Dixon & Bruening, 2011; Ewing, Gano-Overway, Branta, & Seefeldt, 2002; Warner & Leierer, in press). These include, but are not limited to, physical fitness, self-esteem, social skills and the ability to make moral decisions (Ewing et al., 2002). Parents often enroll their children in sport leagues in the hopes that the child will reap these positive benefits and maintain a healthy lifestyle (Coakley, 2006; Dixon, Warner, & Bruening, 2008; Fredricks & Eccles, 2004). This research has shown, however, that positive development does not automatically occur for children enrolled in sport (Chalip, 2006; Hartmann, 2003; Warner et al., 2015). In fact, many negative outcomes are also associated with youth sport, including cheating, high injury rates, high burnout, and a drain on family resources such as time and money (Côté, 1999; Frey & Eitzen, 1991; Thompson, 1999).

Research also supports that organized sport may provide parents an opportunity to contextualize parenting behaviors through sport (Dorsch, Smith, & McDonough, 2015). Thus, family communication is enhanced as parents use sport as a vehicle to teach life lessons. Clearly, not all leisure activities are equal when it comes to their impact on individual and/or family functioning. Further, current U.S. trends indicate an increase in youth sport specialization and elite sport participation (Aspen Institute, 2015), and little research has been done on the impact this route will have on family functioning. While there is support that positive outcomes are associated with both family play and participation in organized sport, it is unclear what conditions are beneficial or hurtful for

family functioning especially in elite youth sport.

The purpose of this study is to understand the relationship between elite youth sport participation and the family system. More specifically, we intend to answer RQ1: "How is participation in elite youth sport impacting families?" And RQ2: "What league characteristics facilitate or impede family functioning?" In doing so, this study contributes to the sport management literature by examining how youth sport implementation impacts families. The findings from this study can provide information to families about how to successfully navigate the youth elite sport experience. It also provides sport managers with knowledge that can improve the design and implementation of their sport programs such that participants and their families benefit from greater family functioning, ultimately resulting in sustained and perhaps healthier life-long sport participation (cf. Berg, Warner, & Das, 2014; Lim et al., 2011).

Theoretical Framework: Family Systems Theory

Given the complex nature of families and the variety of interactions that occur within a family, it makes sense to view a family as an entire system as opposed to a collection of individual parts (Becvar & Becvar, 2000; Olson, 2000). Parsons (1951) noted that the components of a family must include diffuse social interactions, particularistic rules, affective relationships, and ascribed relationships. In other words, a family must have a variety of interactions that span a variety of situations, have flexible rules that apply to different members based on their familial role, have an expression of personal feelings and emotions and finally have status independently of others within the family. Consequently, studying the family members individually and combining the data will not present a complete picture of the family, as the whole family is greater than the sum of its members (Olson, 2000).

The key to understanding a system as a whole is to focus on the interrelations between parts of the system. In the case of the family, the interrelations between parts refer to the interactions between family members. Bronfenbrenner's (1995, 2005) Process-Person-Context-Time (PPCT) model, is one of several important family systems theoretical models. It examines how human development is influenced by the environment in which the person exists and also the interactions that occur within that environment. These interactions are referred to as proximal processes and operate over time. For example, if a decision is going to be made as to a sport in which to enroll a child, multiple interactions within the family will take place. The child might suggest some sports in which he or she is interested and discuss those with one or both of the parents. The parents might discuss with each other what sport and league they feel is most appropriate for their child. These interactions may occur

regularly and may change in content and outcome over time and can also have an impact on the development of both the parents and the child.

Such relationships and negotiations are also reciprocal—going from parent to child, and child to parent, and inside and outside the family. Sport scholars have also highlighted these reciprocal relationships among athletes and parents (Dorsch et al., 2009, 2015; Holt, Tamminen, Black, Mandigo, & Fox, 2009). The reciprocal nature of relationships in the family and how, in the larger context, they work towards homeostasis within the family is paramount to understanding family functioning (Cox & Paley, 1997). Just because the relationships are reciprocal does not imply that they are random. In fact, a number of scholars suggest they are arranged hierarchically (e.g., Broderick, 1993; Cox & Paley, 1997; 2003). The hierarchical nature of families is defined by the boundaries that exist between the subsystems. In a family, the dominant subsystems are the marital, parent-child, and sibling subsystems. The boundaries between subsystems help establish roles and maintain family rules (Minuchin, 1985). In families with rigid boundaries, the hierarchy is stronger and more authoritative in nature, while families with flexible boundaries are more democratic and children have more input.

Prior research has shown a positive relationship between subsystems and individual development. For example, a positive linear relationship has been shown between the parent-child subsystem and individual development. In addition, a positive linear relationship between the parent-child subsystem and marital subsystem has been supported in the literature (Cox & Paley, 1997; 2003). Individuals in the family are affected by the ongoing patterns that take place within the family (Minuchin, 1985; Olson, 2000). Development refers to both the behavioral change as well as the intellectual growth of individuals in the family (Minuchin, 1985). While development sounds as if it refers only to positive growth, Bronfenbrenner (1992) pointed out that the core of development is a change within the individual that can either be positive or negative.

While the majority of research on the family has focused on individuals and the subsystems that are composed of dyads, family therapists and family systems theory have noted the importance of expanding the research focus to triads and larger family units (Cox & Paley, 1997; 2003; Olson, 2000). Thus, a family systems perspective will be utilized to better understand the impact of youth sport on families.

Organized Sport and the Family

Both parental and sibling input have been found to impact the athlete experience. Research supports that parents who do not place pressure on their children to be successful, but remained supportive, are more likely to have engaged athletes

(Dixon et al., 2008; Fraser-Thomas, Côté, & Deakin, 2008). Conversely, parents who attempt to coach their children, offer incentives for winning, and/or pressure them to remain on the team are more likely to cause their child to drop out (Fraser-Thomas et al., 2008). Siblings also play a significant role in the athlete's experience. Athlete engagement is enhanced if the sibling is supportive and does not engage in rivalries or jealousy (Blazo, Czech, Carson, & Dees, 2014; Fraser-Thomas et al., 2008).

In addition to variation in how both parents and siblings engage with the athlete, scholars have also examined the relationship between the family as a unit and sport participation choices and experiences. Côté (1999) found that families play important roles in terms of socialization and financial, time, and emotional support for children as they progress in sport. These roles shift throughout the developmental model of sport participation, moving from serving as the socializing agent to predominantly providing time and financial commitment. Typically, the family's first role in youth sport participation is through socializing the child into a sport league, and providing numerous sporting opportunities for the child. Dixon et al. (2008) and Coakley (1987) specifically stated that parents who are former athletes themselves are more likely to initiate the socialization process of their children into sport. Beyond influencing children into beginning their sport involvement, parents also socialize children towards their sport achievement orientation and influence whether or not elite sport is pursued (Kay, 2000).

Wiersma and Fifer (2008) found that beyond the initial introduction and socialization, parents in particular also provide instrumental support (transportation, financial resources, etc.). One of the various demands that organized sport has on the family is consumption of resources (Dixon et al., 2008; Kay, 2000). In a study on elite athletes, Kay (2000) found that the financial commitment to participate in high-level sport was cited as the biggest issue for families. This financial burden of participation was also found to be substantial in other studies related to youth sport and family (e.g., Dixon et al., 2008; Hellstedt, 1995).

Beyond financial commitment, families noted a large time commitment to youth sport. Kay (2000) refers to this time commitment as an alteration in family activity patterns. In her study, parents noted that the sport time demands affected their daily schedule and caused changes to vacation plans and work hours. One parent even noted he would sleep in his car after dropping his child off at swim practice to gain additional sleep before starting the workday. The large amount of time required to provide opportunities for deliberate practice for their children is crucial for skill development and clearly alters family activity patterns and schedules (Ericcson, Krampe, & Tesch-Romer, 1993). Thompson's (1999) work further supported this notion, as the mothers of elite tennis

players she interviewed needed a large time commitment just to drive their children to tournaments and practice, usually sacrificing their own opportunities for sport participation.

In addition to providing instrumental support in the form of time and finances, families also provide emotional support to participants (O'Rourke, Smith, Smoll, & Cumming, 2014; Wiersma & Fifer, 2008). The emotional resources provided by the family are crucial for the athlete's well-being and continuation in sport. Whether it be a post-game talk, providing motivation, or helping the child to maintain a balance between competition and fun, emotional support is crucial for maintaining a positive experience for the participant (Dixon et al., 2008; Warner et al., 2015; Wiersma & Fifer, 2008). Kay (2000) found that families typically believe that providing emotional support is also necessary for talent development. Many of the athletes that she interviewed stressed that without emotional support from their family, they would be unmotivated and unlikely to continue in the sport.

Sport and Family Outcomes

With the variety of roles the family plays, it is important to understand the different outcomes for both individuals and families related to the sport experience. Individual sport-related outcomes for family members may be positive or negative. Potential positive benefits for the participant may include talent growth, an increase in self-esteem, or the development of persistence (Fraser-Thomas, Côté, & Deakin, 2005). Negative impacts may include an increase in stress and anxiety (O'Rourke et al., 2011) along with a decrease in self-esteem or injury (Fraser-Thomas et al., 2008; Kay, 2000). Kay (2000) found that some athletes experienced emotional highs and lows that were directly related to their performance in their athletic event. In some instances, athletes undergo high levels of stress, due to parental and coach pressure; they often suffer from burnout and cease participation (Fraser-Thomas et al., 2008). Other athletes suffer injury from too much participation and some studies have shown as high as 21.5 percent of athletes were asked to participate while injured (Engh, 1999).

While much work has focused on the inputs and outcomes for sport participants, much less attention has been given to the impact of sport on other family members and the family itself (see also Warner et al., 2015). For other individuals in the family, positive benefits may include an increased sense of pride for the participant's experience or the addition of more instances of socialization with other individuals. For example, Kay (2000) found that some parents felt a greater sense of pride when their child was successful on the field or court. Dorsch et al. (2009) found that sport can be a powerful vehicle for parent socialization. As parents became more socialized into sport, they began to use the sport context to improve

communication, teach life lessons, and enhance their own development as a parent (Dorsch et al., 2015). Negative impacts may include feelings of jealousy, resentment, or a lack of time for other activities (Côté, 1999). Siblings have reported negative impacts of their brother or sister participating. Kay (2000) found that some siblings who did not participate felt jealousy toward the athlete and felt their relationships with their parents were not as strong as the relationship between the athlete and parents. Finally, parents have been shown to engage in lower levels of physical activity as a result of their children's participation (Dixon, 2009; Thompson, 1999).

In addition to positive or negative outcomes for individual family members, it is plausible that the family unit may also experience positive or negative outcomes. A few studies have indicated the potential positive outcomes for families, which include an increase in family closeness or improved family communication (Zabriskie & McCormick, 2001). Potential negative family impacts include feelings of jealousy or resentment, depletion of resources, or a conflict of family values with the values of the sport league (Côté, 1999). For example, mothers in Thompson's (1999) study cited that their entire family suffered burnout-like symptoms from the time demands placed on the family to foster participation in youth sport for one family member.

In summation, researchers have examined the relationship of sport and families, yet the majority of these studies have examined the unidirectional relationship of the family to sport, particularly how families can better support the high performance sport participation of children (cf. Green & Chalip, 1997; Hasbrook, 1986; Kay, 2000). The current literature base illuminates a few of the ways that individual family members and the family unit may be impacted by youth sport in general, but does not necessarily identify the components of the sport experience that lead to positive or negative outcomes. Given the initial work in elite youth sport by Kay (2000) and Thompson (1999), it appears that elite youth sport participation may have strong and lasting influence on family members and family systems. As youth sport in the U.S. trends towards more elite, travel-based teams with a focus on skill development, and away from more playful, leisure-type activities (see Aspen Institute, 2015), it is crucial to understand what impact (both positive and negative) these particular contexts have on families and how leagues might foster more positive outcomes for families.

Method

A multiple case study approach was utilized as this study thoroughly examined multiple families in regards to a specific social phenomenon, elite sport participation. Further, the cases were used in constant comparison within and between families to gain insight into how this social experience is impacting family functioning. Similarly to Dorsch and colleagues (2015), a

social constructivist epistemology was used to frame the study. This epistemologically standpoint and multiple case study approach were appropriate for gaining in-depth insight and knowledge into a specific social phenomenon.

From a practical perspective, Eisenhardt (1989) provided a step-by-step guide for conducting a multi-case study. This study of multiple families fit neatly in her practical framework. Using the multiple case approach (Thomas, 2011), we utilized both inductive and deductive reasoning to guide our coding and analysis. Constructs based on family systems theory were initially identified a priori in an attempt to provide more empirical grounding for the emerging theory. Then, utilizing procedures that Glaser and Strauss (1967) suggest, the data were continuously compared and analyzed until themes began to emerge. Thus, both deductive and inductive processes were utilized—with an eye toward family systems theory, yet openness to the emergence of new experiences and codes, especially those that were specific to sport.

Specifically, this study utilized multiple family cases to examine the major elements of the sport experience that impact family functioning. The themes that emerged within families were compared with and across families (Eisenhardt, 1989). This type of comparative case-based research has the ability to simultaneously examine multiple facets of data to provide a holistic view of a complex situation (Glaser & Strauss, 1967).

One underlying assumption within the study was that participation in extracurricular activities would introduce stressors into the family unit. Further, various aspects of family structure, and the nature of the activity, all play a role in the overall impact of the activity. As a population was identified to study, the authors identified a specific population - elite youth sport participants - that would introduce higher amounts of stressors to the family system.

Eisenhardt (1989) noted that the concept of population is crucial in case study research, as it has an effect on controlling variance and the generalizability of the study. The authors note that there are many sport and family variables that impact family functioning. Considering the purpose of this study was to understand the impact of participating in elite youth sport on the family unit, purposeful sampling was used to identify families involved with elite youth sport. There are seemingly endless combinations of family types and structures (Broderick, 1993). Attempting to cover all of them would be nearly impossible and would lead to so much variance in the family make-up itself that the relevant family variables to the study could not emerge. Thus, variables such as family size and composition, socioeconomic status, and sport experience were controlled for through purposeful sampling as both family variables and sport variables may impact family functioning. Family parameters were limited to those that have two married

parents at home with at least two children. These parameters were set because families participating in an elite travel-based league and who have multiple children with whom to negotiate schedules and resources are most likely to experience stress that will impact family interactions and possibly family well-being.

Procedure and Participants

Once families were identified through purposeful sampling and gave verbal consent, interviews were scheduled at the family home. Upon arrival in the home, participants signed an Institutional Review Board approved informed consent form. Data were then collected through semi-structured, in-person, one-on-one interviews with each family member. Interviews were semi-structured, but followed an open-ended interview guide targeted to gaining insights into how the family functioning was affected by participation in the youth sport league. Interview guide questions were derived from Orlick's (1974) interview schedule designed to assess family sports environment and from the McMaster Family Assessment Device (Epstein, Bishop, & Levin, 1978). Sample interview guide questions included, "Tell me about the decision you made to initially get your child involved in sport"; "Tell me about your role with the team and what that entails" and "Tell me about a great/worst experience you had with your team". Interviews lasted between 45 minutes and one hour with each family member. Interviews were audio recorded and field notes were taken.

Seven families, with a total of 31 participants, took part in interviews (see Table 1). All parents in the study were married at least 10 years, and had children ranging from 8-18 years old.

Data Analysis

Interviews were transcribed and then the primary researcher used semi-closed coding to code the data line-by-line. That is, in the first iteration, themes such as communication, resources, impact on marital dyad, and family structure that are based in family systems theory were coded in the data. Then, in the second iteration, the primary researcher examined the data for emergent codes—examples of such codes include league supports, expectations, and scheduling.

Then, the similarities and differences in the data were compared (i.e., constant comparison) to generate a coding scheme and final codes (Glaser, 1978). Codes were then clustered into categories. This process continued with the influx of new data until data saturation occurred, the point when no new categories were generated from the codes. Categories are compared to one another and the relationships and integration of categories form the basis for the emergent theory (Glaser, 1978). Data collection and analysis continued until saturation occurred and the benefit of adding new cases was outweighed by the

contribution that each new case would add (Glaser & Strauss, 1967). This method of coding was used to allow the researchers to gather rich data that was informed by prior cases. This allowed categories that were identified early in the study to be further examined.

Once data were all coded, the next step of data analysis in the comparative case method was within-case analysis. Data from each case study was written up as a stand-alone entity (Eisenhardt, 1989). By focusing on each case individually, unique patterns were allowed to emerge from within each case. Next, between-case comparisons were conducted. This entailed analyzing for within-group similarities and intergroup differences. At this point, no new themes were emerging, the researchers were garnering a sense of the themes' meanings and how they fit together. Thus, all three researchers independently compared the cases in order to provide more focus for intergroup analysis (Eisenhardt, 1989).

The final stage of analysis was to compare across the cases. This was undertaken by all three researchers. The overall goal of between case comparisons is to move past simple first impressions of the data and to increase the likelihood of generating novel insight. Through this iterative process, the code categories that emerged were condensed into themes that best represented the participant families' experiences within elite youth sport.

Results

After interviewing seven families, the results revealed there were some commonalities across the families in terms of the challenges and supports that positively or negatively impact their family functioning. First, the overview of challenges for martial dyad and family unit will be provided (RQ1: "How is participation in elite youth sport impacting families?") and then the specific league characteristics will be highlighted (RQ2: "What league characteristics facilitate or impede family functioning?").

Challenges: Impact of Youth Sport on Families

Depletion of Resources

The main challenge that all families incurred as a result of their participation in youth sport was the incredible demand on time and financial resources. While reduced family time was evident across all families, the consumption of financial resources had a larger strain on the families with the lowest income in the sample (Family 3 and 6). The results indicated this *Depletion of Resources* impacted both the martial dyad and family unit.

Martial Dyad Impact. All of the families in this study had parents who were married for over 10 years. This was probably a source of strength in that the marriages seemed to be seasoned and relatively stable. However, children's participation in elite sport placed tremendous strain on the marital dyad due

to the *Depletion of Resources*. Elite sport consumed a lot of resources (e.g., money, time, emotional and physical energy), reducing the amount that could have otherwise been spent on the marital dyad. The mother in Family 1 said that she and her husband's conversations typically consisted of working out logistics for the children. She said, "Our conversations go something like, 'What are you doing? Where are you going? When are you going to be here?' You know, typical kind of coordination type stuff." Speaking to what she and her husband regularly discuss, the mother of Family 6 said:

> Sometimes we don't even talk. He's at the field picking them up at 10:00 p.m. There are some weeks it feels they have practice after school five days a week and he is either in the car or at the field.

The father from Family 6, when asked about spending time with his wife said, "Yeah, but that doesn't come with having kids. You can make some time, but before they start driving, the only way she is going to get there is by you driving her [the daughter]." Family 3 also noted issues with time dedicated to the marital dyad. The mother said, "I think it goes back to the sacrifice area. Honestly, pretty much every night of the week is involved with sport or sporting events. I think it's something we neglect. Taking time for just the two of us." The father from Family 3 added, "Between our kids and my job, there's usually not a lot of time to spend together."

Overall it was clear that the martial dyads in these families were experiencing stress and a severe lack of quality communication as a result of a child participating in elite youth sport. This stress was attributed to the time commitment of sport that was interfering with overall quality interactions with spouses. Despite this added stress, most parents accepted this as part of having a child athlete. To them, the opportunity provided to their child to play sport warranted the sacrifice they were making.

Family unit impact. Another result of *Depletion of Resources* in the elite youth sport experience was a strain on the family unit, especially considering the participating families had multiple children. With conflicting activities from other children, parents and children often noted how they would divide the family to accomplish their tasks for the day. This seemed to have a negative impact on functioning, potentially impacting cohesion and reducing the amount of time spent together. For example, Family 2 often split up on the weekends in order to accommodate the schedules of their children's activities. The father said, "With three kids, we have often overlapping activities." The oldest daughter in Family 2 mentioned how she wished more people from her family could come to her concerts. She added, "Most of the time, we don't have time to do other things because I'm always in a concert or my brother or sister have a game. It'd be fun if we had more time *together*."

The youngest daughter of Family 6 expressed a desire to spend more time together as a family and said that she "hates" attending practice and soccer games. She summarized simply, "It makes me angry." Family 3 gave priority to the older sibling in terms of extracurricular activities. The father noted, "I will not let my son play for certain baseball teams due to their practice schedule. We tell him we want him to try everything, but we don't want the two sports to overlap too much." While it is important to maintain a schedule that works for the family, giving priority to one's activities over another may impact the relationships within the family.

Family 4 further highlighted the problem with time demands. The youngest son was not only resentful that he was unable to freely choose his extracurricular activities, but also expressed a desire to spend more time as a family together. Family 5, in perhaps an extreme example, was living two hours apart so the son could attend a hockey academy. All four family members expressed a desire to spend more time together, but noted that it was "just a sacrifice" that comes with participation in the academy.

Family 3 was negatively impacted by *Depletion of Resources*, but in this case it was in terms of both financial strain and time spent together. The father said:

> Financially, it's a struggle. Sometimes we do without other things to meet the cost. I tell my daughter, and I don't think she takes me serious, but I've wanted a 24-foot boat and I'm like, 'I want you to know that instead of me getting my boat, I'm investing my money in you: our travel, our plane tickets, fuel, upkeep of cars, food, lodging and extra training.

This not only put a financial sacrifice on the family, but it also placed additional stress on the daughter as she overtly understood the family was making trade-offs for her benefit. Family 6 also felt the *Depletion of Resources* in terms of financial strain negatively impacting the family unit. The father of Family 6 said, "There are certain things you can't do because of the cost and because every weekend she's tied up. It makes it hard to visit relatives or take vacation." Both children mentioned a desire to take more family vacations and the youngest daughter expressed an interest to even see more movies as a family. Like some of the other stressors associated with sport participation, Family 4 felt this was a necessary sacrifice. The mother said, "It's definitely a sacrifice, but when your kids love it that much you do what you have to do."

One family, however, was an exception. They perceived that elite youth sport participation demanded resources in a positive way. This family, Family 7, had all three children enrolled in the same club. The mother said:

> It has impacted our family very much. I don't know, most of what we do is being in the pool and going to meets. We never said our kids had to be

involved, but once you are there for so long you might as well get in the water and get some exercise. Swimming is part of our family. It has been very positive.

Even in the rare case when only one child had a meet, other members made an attempt to attend. The oldest son said, "Like yesterday, I went to her practice and then she went straight to a meet and we watched her swim." Their sport time, most likely because they were in the same sport at the same club, was spent together as a family, potentially increasing their cohesion and functioning.

The trade-offs and sacrifices needed to participate in elite youth sport appear to generally have a negative impact on family functioning, particularly in the marital dyad. Families that intentionally pursue sports for the whole family may be the exception. Still, this family did not suggest that sport did not place a strong demand, but simply that the resources (time and money) were well spent and perhaps mutually beneficial.

League/Sport Support of Families

The data also revealed specific league or sport club characteristics or supports that also impacted the family and family functioning (RQ2). Interestingly, *coaching input, scheduling, league expectations,* and *instrumental support* were found to be key themes when the participants discussed league supports and family functioning.

Coaching Input. One situation that had a positive impact on family participation, and thus may have impacted family functioning positively, was parental input on coaching decisions. Family 1 had direct input, in the form of interviewing potential candidates to serve as their child's elite head coach. This family noted that the coach that they helped choose shared their same values and, as a result, the family had an overall positive relationship with the coach even in the face of adversity. The mother stated, "I liked [our coach] for a lot of reasons. I had heard about him and got [my son] where he needed to be so he could be on that team…He's a Christian man. He teaches the boys about baseball, but he also taught them how to be good people." It is likely that these positive feelings, both from the athlete and the parents, increased family functioning. Family 5 did not have direct input in their son's coach, but had the opportunity to meet him and were able to establish a sense of his values prior to enrollment. This enabled them to be sure that he shared similar values to their family and that he would be a good coach, not only for their son, but for the parents as well.

The families whose sport teams did not allow for parents to have a say in the coach or even the ability to interview a coach ahead of time noted some difficulties. Families often switched clubs or noted that the experience for their child was negative. The father from Family 2 said, "Once you get a professional coach, I think there should be some feedback because those leagues are not cheap. It would be good to have a feedback loop for the parents to tell

people if they like the coaches." Family 4 noted difficulties with the entire process of their daughter being selected to a team. The father said:

> I wish I knew how they made their trooper decisions or how they say this person will be on this team and this person will not be on this team. I don't think it's necessarily the skill all the time. I think a lot of that is being who you are or how you present your kid. I just want it to be fair all along the process.

If a family does not have say in the coach, they do not have the ability to select a coach that is a good fit with the family. If a family is able to select a coach that has shared values and goals, like in Family 1 and Family 5, they can advocate for a specific coach that will provide appropriate development for their child and be perceived as fair. In cases in which the family has no voice in the coach, there were feelings of resentment and a perceived lack of trust. Most parents justified wanting input on the coach due to the high cost of the league. They wanted to see a perceived value for the salary the coach requires. Overall it was clear, for both the athlete and the parents, *coaching input* impacted the individuals in the family system and lack of it reduced functioning.

Scheduling. Another way that the clubs structured their leagues that impacted the family was through inconsistent scheduling and schedule changes. The mother in Family 1 summarized difficulties of schedule changes, "[The coach] would change the practices. . . .Yes it's a time commitment…[but] I have to have some kind of continuity in what's going on." When leagues were consistent with their scheduling, families were able to make necessary adjustments to provide appropriate instrumental support. This removes some of the stress present in the family system and also increases their problem solving ability; thus, positively impact functioning. Family 7, despite living in separate cities, noted increased levels of cohesion and communication as a result of clear *scheduling*. The hockey academy demanded a large amount of time, but had a consistent schedule that was set and easier to plan for and manage. The father noted:

> The team provides a bus that picks him at school and takes him to practice. And, he's at practice from 2:00pm until 6:00pm. Our apartment is about five minutes away from the rink. So, I usually wrap up my work-day about 5:30 pm, and then drive over and pick him up from the rink. We come home, and have dinner, and he does his homework. And, because of that, he has a lot more time, to focus on things that he needs to focus on. Not spending so much time in the car is a big part of that.

Family 7 suggested this consistency in *scheduling* positively impacted their family functioning. Conversely, families without this type of firm schedule found *scheduling* to negatively impact their family functioning. Family 1 noted that their team was sporadic

with its scheduling, the team frequently gave short notice of practice time changes, and it became difficult to coordinate everyone's schedule. The mother added:

> When we first joined on with him he would change the practices. I'd say, 'Are you joking with me? [My son] is not my only child! Baseball is not my only thing. . . . You can't do that to me.

By changing schedules and not considering families scheduling needs, the league is likely negatively impacting family functioning.

Expectations. League expectations also may impact family functioning. Most of the families in this study talked about a change in expectations when their elite athlete went from recreational sport to elite sport. In addition to an increase in practice time and in events, there was a level of expectation that attendance was mandatory. With recreational leagues and even high school teams, families talked about how they could miss practice if something important to their family came up. When the children were enrolled on the elite team, missing a practice was not an option. The mother from Family 1 commented on the *expectations* in elite sport:

> I think the expectations change. They expect your son to perform at all times. Whereas *daddy coach* [volunteer coach], it's fine! I expect the *daddy coach* to do good for my son, whereas the paid coach expects my son to perform. It's kind of switched.

She commented that her coach offered optional clinics each week, but felt that there was an expectation for her son to attend all of those clinics. Reflecting on recreational sport, the father from Family 4 talked about a great team his oldest daughter played for "before politics and everything got involved like in select soccer or select sport." The mother in Family 6 added:

> Until last year [our oldest daughter] never missed a practice. I mean, at one point, she had broke her toe on the field. She played on it and it got infected. It ended with her being in the hospital for a week, but she didn't miss any practice because they were rained out that week.

The ramifications of missing practice or games included upsetting the coach, missing out on skill development opportunities, or not getting playing time solely based on the fact that practice was missed. This additional pressure seemed to cause families to reprioritize activities within their family and in some cases eliminate certain activities. For example, the son in Family 2 was only allowed to participate in sports that were not in conflict with his sister's elite soccer. Due to the league *expectations*, the parents in Family 2 were forced to prioritize their children's sport opportunities and this impacted family functioning.

The leagues' expectations regarding the structure and manner in which leagues inform parents of additional costs also seemed to impact the family unit. Families 3, 5, and 7 were all members of leagues that were clear and candid with the cost of their

services and did not overburden families with additional clinics or extra services. In these instances, families still thought the prices were high, but were able to make informed decisions about enrolling. This allowed them to appropriately plan for the cost of the league and alleviate the stress of surprises. The father from Family 2 said:

> I was really shocked at the price when I first looked at it. First of all, being from France, I was not used to seeing people spend that much money on sports. So to me it seems excessive. I mean, it's nice having all of the matching gear and being part of a team, but it's a little bit overboard. I know there is some assistance to enable people who don't have the means to join, but there are some people that probably don't participate because they just can't afford it. I think that's too bad.

The other families were involved with leagues that offered additional clinics and provided supplemental services such as recruitment packages. In these leagues, families were not as able to plan for the costs associated and often felt pressure to partake in these services as the league was not upfront about their *expectations*. The mother from Family 4 said, "And there are other fees that just come up for stuff. Like [for my oldest daughter], there are like recruiting aides that we have to buy." She estimated it cost $200 and noted that there was pressure to purchase the recruiting aid from the league, and peer pressure to get the same thing for her daughter that her teammates were getting. The mother from Family 1 spoke about optional clinics that her son was expected to attend and said, "[The coach] called it optional. [My son] would participate in one of them on Tuesday or Thursday for an hour and half. We paid extra for those." The overall financial expectations, along with making decisions that were not fiscally sound or partaking in extra activities due to pressure that resulted from *expectations* not being clearly explained, contributed negatively to family functioning.

Instrumental Support. One of the most salient ways that the leagues helped support families was through reducing the amount of instrumental support provided by the parents. Interestingly, Families 5 and 7 had unique situations that enabled the families to significantly reduce the amount of instrumental support they provided on their own. In the case of Family 5, the hockey academy handled almost all of the transportation. Transportation to and from practice was provided during the week and was included for some games. The father who was living near the academy with his son was able to attend some of his son's practices with ease and did not have to worry about coordinating any logistics during the week. He said, "You know, it's relieved a lot of stress in our relationship. Just in regards of 'who's getting him to practice today?' and 'who's going to be able to take him to his game on the weekend?'"

Multiple families in this study talked about how they required carpools to

provide assistance in cases of scheduling difficulties. One parent suggested that leagues could offer tools online that would enable parents to connect with one another to provide services like carpools. Another example of reducing this *instrumental support* was found in Family 7's swim club. Family 7 still coordinated travel during the week and noted some stress with transportation, but all three children practiced at the same facility. The father said, "The little one doesn't swim in the meets, he is just learning competitive swimming, but the other two swim at the same time. Seventy-five percent of the time we are all there." Not only did this eliminate the need for carpooling and additional support to facilitate practice, it provided an opportunity for the children to complete their homework prior to arriving home for the night. In both Family 5 and 7's situations, the families were able to reduce the amount of time dealing with situations that occurred outside of the family unit, allowing them to focus on the family more when they were together, positively benefitting family functioning. Overall, it was clear that *instrumental support* could positively impact family functioning within elite youth sport settings.

Summary

The results point to how both the martial dyad and family unit are impacted by their child's participation in elite youth sport, specifically through the *Depletion of Resources*. The main way that marriages and families support functioning is through spending time together, and the youth sport experience in most instances creates a challenge to do this. Families that make a specific effort to spend time together as a family are able to better focus on the individuals that make up the family. This focus on all the members collectively should improve family intimacy, communication, and ultimately functioning.

The results clearly indicate the challenge that the youth sport experience provides, due the time commitment and logistics, for both the marriage and family unit. The results also highlight the specific sport league factors that also are impacting family functioning. Specifically, the family's role in *coaching input, league scheduling, league expectations,* and *instrumental support* are key, and perhaps overlooked factors that are impacting family functioning.

Discussion

This study sought to better understand the relationship between elite youth sport participation and the family system. After interviewing seven families, the results highlighted how the *Depletion of Resources* and specific league factors (i.e., *coaching input, league scheduling, league expectations, and instrumental support*) were impacting the families interviewed. Previous research noted that the financial burden was a large stressor on families enrolled in select clubs (Dixon et al., 2008; Hellstedt, 1995; Kay, 2000). In fact, Kay (2000), in a series of interviews with a large number of families,

found that cost was the biggest burden placed on families with elite sport participants. In this study, cost was noted as a concern, especially for Families 3 and 6, but it was not a concern that seemed to impact the families on a daily basis. It should be noted that the families interviewed had sufficient resources, and the number of elite team participation opportunities for them to participate in have increased overall. Thus, this increase may have resulted in parents being more accepting of the costs incurred.

While it appeared that cost was not a huge barrier in this study, the participants did note sacrifices they made in order to play—including foregoing material possessions and even relocating the family. It is not clear, therefore, how individual family members ascribe a value to "financial resources" and when they see the cost as "worth it" or not. Future research should explore the threshold elite sports have in terms of cost and explore patterns of dropout as they relate to family financial resources.

Rather than cost, families in this study consistently cited the depletion of time as the biggest challenge impacting their families. The time spent transporting and coordinating travel appeared to have the largest impact on overall family functioning as it strained the martial dyad. This finding is important because, while the families may not agree with the cost, they accept it and make sacrifices to accommodate it. Families that had to spend a great deal of their time coordinating schedules and transportation appeared to have greater levels of stress surrounding sport, less time to spend as a family outside of sport, and less quality time to focus on the marital dyad and family unit. Family systems theory literature supports the notion that these ongoing patterns of behavior will impact family functioning (Brofenbrenner, 1992; Minuchin, 1985; Olsen, 2000). The parents in this study seemed to dismiss any issues associated with stress as part of having an elite child athlete. Dorsch et al. (2015) found many benefits of parents' socialization into sport, but this might suggest that it could lead to the acceptance of unnecessary stress (in terms of time and financial resources). Despite severely restricting time together, restricting the level of communication, and limiting the ability to participate in other activities, parents accepted the sacrifices and never seemed to question why they were making them.

Future research should continue to explore the family time that is sacrificed for elite youth sports and the assumption that this is necessary to provide opportunity to elite athletes. This would be helpful in terms of building the work of Dorsch and colleagues (2009, 2015) regarding both the processes and outcomes of parental socialization into sport. It would be beneficial to better understand when and how sport participants and families come to understand "what it takes" to be an elite participant, and even more importantly,

how they come to accept those sacrifices as "normal."

One of the big differences between the financial strain and the time strain that sport places on the family is that time stress impacts the family on a daily basis in a palatable way. In addition to dividing families, the time demands of transportation limited the extracurricular activities for all other members of the family, with the non-participant being impacted the most. The ability of a family to cope with these demands is likely linked to the flexibility between subsystem boundaries (Broderick, 1993; Cox & Paley, 1997). A greater priority was given to the elite league, and often siblings had to structure and select their activities in a manner that avoided conflict with the elite league. This led to some cases of the sibling feeling resentment towards the athlete and feeling restricted as to what activities they can select from. Côté (1999) found that siblings play a significant role in supporting youth athletes. If family decisions are negatively impacting the sibling, it is likely to negatively impact the athlete as well. Cox and Paley (1997) note that the reciprocal nature of family relationships is crucial in reaching homeostasis. Future research should focus on the non-participant sibling and the impact this individual has on family functioning.

Another difference between cost and time is the issue of predictability. The cost is typically known ahead of time and families can plan for the predicted costs, but the schedule often changes throughout the season, making it harder to plan for. Some of the families in this study were faced with unpredictable schedules that required problem solving and unplanned alterations to their schedule. Unpredictability causes additional strain on family communications and resources. Fraser-Thomas et al. (2005) found that parental influence has an impact on whether or not the experience is positive for the child. When the program is able to make changes without parental input, it is more likely to introduce additional stress and negatively impact the family. The proximal processes that would be taking place in this environment would likely be negative and thus impact the family unit (Brofenbrenner, 1999, 2005). Thus, sport leagues that are up-front and predictable in terms of cost and scheduling vastly reduce the stress and strain on family functioning. As demonstrated by Family 4's experience, the inclusive, predictable sport structure severely reduced the amount of instrumental support that was required by the family to facilitate the athlete's participation in the elite hockey academy. The sport league taking on this instrumental support (e.g., transportation) that is traditionally provided by the family allowed the family to focus on other members and other assets of their lives outside of sport. Similar findings were observed in Family 7 in that they required less time outside of sport spent on instrumental support because all of the children participated in swimming at the same facility. Despite

three children engaged in three different levels of swimming, the family did not have to split up and send individuals to different facilities in order to accommodate the schedule demands of the sport. An area of future research could compare the family experience in private leagues and those that are organized by parents.

While not everyone will be able to afford or want to send their children to a sport academy or enroll them in the same sport, there are some lessons to be gained especially for sport managers. Sport managers can learn ways that they can ease some of the burden placed on the family. The results suggest that this can be accomplished by understanding the impact that *coaching input, league scheduling, expectations,* and *instrumental support* are having on family functioning. For example, sport leagues could provide transportation to/from practice, allow parents more of a voice in scheduling and coaching decisions, and attempt to schedule facilities that are central to their participants. If leagues were able to assist parents in transportation, it would not only alleviate a large source of stress and time demanded from the family, but it would also allow the league to schedule in a way that benefits the league and the families involved. Leagues would not have to cater to the work schedules of the parents if the league's employees were providing transportation to the athletes. If a league is unable to provide this additional service, allowing the parents to have more of a voice in scheduling could increase the level of engagement of the parents and help the league develop a schedule that would best suit its participants. Granting the parents a voice in coaching decisions might also dually increase the level of engagement between the parents and the league while helping ensure that the majority of the parents are satisfied with the individual who is a coach of their child(ren). Finally, leagues could ease some of the transportation cost to the families by selecting families that are closely located to their facilities. This would not only aid in families being able to carpool, but it would cut down on the total transportation time on the family in order to facilitate transportation. This would decrease the time demands placed on the family.

Families can also better educate themselves about the financial and time commitment that it actually takes to participate in an elite sport league. If families are able to plan ahead for the time demands and the financial demands of the sport, they can select a league that is the best fit for their family. This would also reduce the strain put towards problem solving and ease the total stress placed on the family from elite youth sport participation. Ultimately, this would positively impact family functioning.

Overall, the results point to the impact elite sport has on family functioning, and, in doing so, highlights the challenges that elite sport families face. In an effort to positively contribute to family function, sport administrators should consider the

knowledge gleaned from these results. The results also offer insight into the challenges that parents must learn to navigate in such a way that elite sport does not detract from family functioning.

Future Research

Future research on family functioning and sport should examine the relationship between instrumental support and functioning with a greater variety of sport structures (e.g., recreation, school-based). Such structures could include leagues with central facilities, localized facilities, and leagues that provide transportation to and from practice. This study and its findings are limited to the experience of seven families involved in elite youth sport, and therefore future work should consider both including more families and also following these families over the course of a longer time span. In addition, future research should focus more thoroughly on the non-participant sibling. While this study gained some insights from the siblings, the nature of the research did not afford as much depth as preferred. Finally, future studies should try to gain a greater understanding of family functioning throughout the athletic season. A study that covered a family from pre-season, season, and post-season could better highlight specific incidents and document first-hand the impact they had on the family.

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Tables

Table 1

Participant Table (by Family)

	Married (years)	*Father's Occupation*	*Mother's Occupation*	*Annual Income*	*Child (years)*	*Child (years)*	*Child (years)*
1	16	Restaurant Owner	Stay at Home Mom	Over $200,000	Son (13) - elite baseball	Son (12) - recreational lacrosse	
2	15	Software Engineer	Stay at Home Mom	Over $200,000	Daughter (13) - Cello	Daughter (11) - elite soccer	Son (9) - recreational football
3	18	Student Pastor	Teacher	Under $50,000	Daughter (15) - club volleyball	Son (10) - elite baseball and football	
4	19	Senior Technical Writer	Letter Carrier	$110,000	Daughter (15) - elite soccer	Daughter (13) - elite soccer	Son (8)
5	13	Food Service Executive	Midwife	$100,000	Daughter (18) - recreational hockey	Son (14) - elite hockey	
6	17	Tax Enforcement Officer	Administrative Assistant	$60,000	Daughter (14) elite soccer	Daughter (9) elite soccer	
7	17	Laborer	Substitute Teacher	$100,000	Son (16) - elite swimmer	Daughter (14) - recreational swimmer	Daughter (9) - recreational swimmer

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Examining Sport Team Identification, Social Connections, and Social Well-being among High School Students

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Past research has found that sport team identification is positively correlated with social psychological health (Phua, 2012; Wann & Weaver, 2009) including work testing adolescent fans (Wann, Brasher, Thomas, & Scheuchner, in press). The current study was designed to extend previous investigations by examining the relationship between team identification and the establishment and maintenance of social connections. Data from 177 high school students confirmed expectations as identification with a high school football team was positively correlated with both social well-being and social connections. However, social connections were not found to mediate the relationship between identification and well-being, contrary to the team identification – social psychological health model (Wann, 2006b).

Humans have an innate need to belong with various groups (Baumeister & Leary, 1995; Lavigne, Vallerand, & Crevier-Braud, 2011). As noted by Lambert and his colleagues (2013), "multiple lines of research have provided evidence that social relationships are crucial to finding meaning in life" (p. 1418). By establishing and maintaining connections to others, individuals receive a variety of well-being benefits (Compton, 2005; Lee & Robbins, 1998). For instance, membership in and identification with a variety of groups are related to well-being: including religious organizations (Diener & Clifton, 2002), high school peer groups (Connolly, White, Stevens, & Burnstein, 1987), work/employment groups (Haughey, 1993), and minority groups (Branscombe, Schmitt, & Harvey, 1999). The need to

belong is also manifested through participation in leisure pursuits (Glover, Parry, & Shinew, 2005; Maynard & Kleiber, 2005) and leisure activities do impact happiness (Argyle, 1999), leading Compton (2005) to conclude that, "Any discussion of well-being must eventually take a look at leisure" (p. 67). This includes participation in leisure activities revolving around sport (Wann, 1997). For example, the need for affiliation is a common motive for participation in athletics (Alderman, 1978; Alderman & Wood, 1976; Buonamano, Cei, & Mussino, 1995).

The need to belong and the desire to gain connections with others are also relevant to participation in sport as a fan and/or spectator (Gwinner & Swanson, 2003; Theodorakis, Wann, Nassis, & Luellen, 2012; Wann, Melnick, Russell, & Pease, 2001). For instance, similar to participation in sport as an athlete, the need to affiliate is a common factor underlying the desire of fans to follow a sport, team, or player (Lee & Armstrong, 2008; Wann, Grieve, Zapalac, & Pease, 2008; Wigley, Sagas, & Ashley, 2002). Connections gained via sport fandom and spectating can have important positive social psychological consequences (Pringle, 2004; Theodorakis et al., 2012; Wann, 2006a). In fact, Andriessen and Krysinska (2011) concluded that being a fan and following a team "creates camaraderie, a sense of belongingness and being cared for and can result in sports-related 'pulling together' which might protect against suicide" (p. 180). Interestingly, empirical research has substantiated their claims (e.g., Joiner, Hollar, & Van Orden, 2006).

The current research was designed to investigate the belongingness of sport fans by furthering our understanding of the relationships among sport team identification, social connectedness (i.e., belonging), and social-psychological health. Specifically, we were interested in extending previous efforts by examining these relationships among younger (i.e., adolescent) fans. In many ways, the experiences of younger fans (and youth sport in general) are under-studied within the areas of sport psychology, sport sociology, and sport marketing/management. However, research that has been conducted indicates that the youth sport experience can have important consequences for participants and spectators alike. As for participants, the literature suggests that involvement in youth sports can positively impact the young athletes. Specifically, youth sport participation has been linked with reduced suicidal thinking (Taliaferro, Rienzo, Miller, Pigg, & Dodd, 2010), greater self-confidence (Jones, Dunn, Holt, Sullivan, & Bloom, 2011), and enhanced self-esteem (Kamal, Blais, Kelly, & Ekstrand, 1995; Taylor & Turek, 2010). As for fans and spectators of youth sport, research suggests that interest in youth sport teams may be related to well-being and the establishment of social bonds (Reding, Grieve, Derryberry, & Paquin, 2011). However, other work

indicates that there is a darker side to identifying with a youth team. For instance, consider a recent investigation conducted by Wann, Weaver, Belva, Ladd, and Armstrong (2015) examining the verbally aggressive actions of spectators at youth baseball games. These researchers found that persons with a stronger attachment to one of the teams in the competition reported significantly greater levels of verbal aggression in response to on-field actions. Thus, given the impact that youth sport can have on both players and fans, additional research is warranted.

In the literature review to follow, we examine the current body of empirical research and theory in this area, as well as providing justification for the current study.

Literature Review

The team identification – social psychological health model (TI-SPHM; Wann, 2006c) was designed to explain the psychological impact of gaining connections to others via sport fandom. According to this model, individuals can gain both enduring connections and temporary connections via their sport team identification. Enduring connections occur when an individual resides in the geographic location in which a team is found. For example, a Green Bay Packers National Football League (NFL) fan who lives in Green Bay will consistency find himself or herself in the company of other fans of the team. These other fans provide the individual with enduring connections. Temporary connections, on the other hand, are short-term relationships acquired by persons who do not reside in a team's geographic locale. For instance, imagine if the Packers fan described above lived in a distant city, for example, Nashville, TN. Given Nashville's distance from Green Bay and the fact that Nashville has its own NFL team (the Tennessee Titans), the fan will not have enduring connections to others as a result of his Packers fandom. However, if this person learns that several dozen similarly displaced Packers fans gather each Sunday at a local sports bar to watch the team, the fan will, while watching the team in the company of other Packers fans, be able to gain temporary social connections as a consequence of his or her identification with the team. According to the model, enduring and temporary connections are expected to lead to improved social psychological health. Threats to the fan's identity as a team follower (e.g., poor team performance, player arrests) and attempts to cope with the identity threats are expected to impact the pattern as well.

Research has supported much of Wann's (2006c) model. For instance, team identification has consistently been associated with positive social psychological health including lower levels of alienation (Branscombe & Wann, 1991), collective (group-level) self-esteem (Phua, 2012), extraversion (Reding et al., 2011), and social integration (Wann & Weaver, 2009). Furthermore, fans experience a variety of threats to their identity as a team follower,

such as poor team performance (End et al., 2003) and unscrupulous and/or illegal behaviors by players (Fink, Parker, Brett, & Higgins, 2009). Additionally, research has identified a number of coping strategies utilized by fans to combat these threats including biased attributions (Sherman, Kinias, Major, Kim, & Prenovost, 2007), positively biased predictions of future performance (Markman & Hirt, 2002), superstitious actions (Wann et al., 2013), and utilizing retroactive pessimism (Wann, Grieve, Waddill, & Martin, 2008). However, the component of the model most relevant to the current investigation concerns social connections related to following a team and, specifically, the interrelationships among team identification, social connections, and social psychological health. As noted, the model predicts that identification with a local team will result in social connections, which will then subsequently lead to social psychological health. Previous research has established that fans do indeed establish and maintain connections/social capital with others as a result of their interest in a team (Clopton, 2008; Clopton & Finch, 2010, Kelley & Tian, 2004; Palmer & Thompson, 2007). However, investigations of the precise patterns of relationships among the critical variables have only been partially supportive of the model. For instance, consider the work by Wann, Waddill, Polk, and Weaver (2011). These authors asked college students to complete a questionnaire packet assessing their level of identification with the local university men's basketball team, the extent to which they gained and maintained connections with others via their involvement with the team, and social psychological health. Simple correlations among the variables generally supported the TI-SPHM. For example, as expected, team identification was positively correlated with several indices of social psychological health. Also as predicted, identification was positively related to a variety of assessments of connections derived via the team. However, subsequent analyses failed to support the hypothesis that connections would mediate the relationship between identification and social well-being. Rather, the data indicated that team identification had a direct relationship with both social connections and social well-being. Based on their data and analyses, Wann and his colleagues concluded that modifications to the model may be warranted.

The Current Study and Hypotheses

As noted above, the current investigation was designed to further test the TI-SPHM and examine the interrelationships among identification, connections, and well-being. Given that prior work had almost exclusively examined college student samples, we chose to extend past research by investigating high school athletics and adolescent fans. A few studies have tested various components of Wann's model within the realm of high school sports. For example, Reding et al. (2011) examined the relationships among

identification with high school football teams, social connections, and social well-being. As expected and consistent with the TI-SPHM, team identification was a significant unique predictor of both social connections and social psychological health. However, although this investigation was an examination of Wann's model within the context of high school sports, the participants were adults. Wann, Brasher, Thomas, and Scheuchner (in press) extended this research by examining identification with a high school football team and well-being among adolescent students. Their results indicated strong support for the model and replicated previous work with college student (e.g., Branscombe & Wann, 1991; Wann & Weaver, 2009) and elderly populations (Wann, Rogers, Dooley, & Foley, 2011). Specifically, identification with the high school's football team was a significant predictor of social well-being for students at that school (higher levels of identification corresponded with higher levels of social life satisfaction and lower levels of social isolation).

Thus, it appears that the team identification – social psychological health model (Wann, 2006c) can be generalized to high school sports and among high school fans. However, the previous work within high school athletics had yet to sufficiently examine the interrelations among the three critical components of the model (i.e., identification, connections, and well-being). Given that past work had failed to confirm the pattern of effects predicted by the model (e.g., Wann, Waddill, et al., 2011) and researchers had yet to examine these variables with an adolescent sample targeting high school athletics, such an examination was warranted and was the focus of the current investigation. Specifically, we tested the following hypotheses:

Hypothesis 1: It was hypothesized that level of team identification with the high school football team would be positively correlated with establishing and maintaining social connections.

Hypothesis 2: It was hypothesized that there would be a positive correlation between identification with the high school football team and social psychological health.

Hypothesis 3: It was hypothesized that social connections would mediate the relationship between team identification and social well-being.

Method

Participants

The original sample consisted of 185 students attending a public mid-sized high school in the mid-south (enrollment was approximately 540 students at the time of testing). However, eight persons returned incomplete protocols and were therefore removed from the sample. Consequently, the final sample consisted of 177 students (94 male; 83 female). They had a mean age of 16.20 years (SD = 1.14). The sample consisted of sophomores (54%) and seniors

(46%) (due to a limitation in participant availability on the day of testing, only sophomores and seniors were available for participation).

Target Football Team

The target high school football team had been extremely successful in recent seasons, achieving a record of 46 wins and only 7 losses during the previous four years. The team had qualified for the state playoffs in each of those seasons. Testing occurred during the fourth week of October. The team had a record of 4 wins and 3 losses at the time of testing.

Materials and Procedure

Subsequent to receiving IRB approval and gaining participant/parental consent, respondents were tested in groups in a high school cafeteria. Participants were handed a cover letter describing the study and a questionnaire packet containing four sections. Section one included demographic items assessing age, gender, year in school, whether or not the participant played in the school's marching band (the band routinely performed at half time of football games), and whether or not he/she played on the high school's football team.

Next, participants completed 10 items similar to those developed by Wann, Waddill, and their colleagues (2011). These items assessed the extent to which individuals believed they were able to gain and maintain social connections from their association and identification with their high school's football team. The first two items targeted participants' estimates of the percentage of their friends who were fans of the target team. Specifically, they were asked "What percentage of your friends (from simple acquaintances to closest friends) do you feel are strong and involved fans of (name of team was inserted here)?" and "What percentage of your closest friends do you feel are strong and involved fans of (name of team was inserted here)?" These two items were combined to form a "Percentage of Friends" index. The next two items were combined to form a "Number of Friends" index. These items asked "How many of your friends (from simple acquaintances to closest friends) do you feel are strong and involved fans of (name of team was inserted here)" and "How many of your closest friends do you feel are strong and involved fans of (name of team was inserted here)?" Thus, in the first "Number of Friends" item, participants considered all of their friends while in the second item they were to include *only* their closest friends.

Next, participants answered six Likert-scale items targeting social connections gained through supporting the high school football team. These items read: "To what extent do you feel that being a fan of (name of team was inserted here) helps you maintain your friendships with others?," "To what extent do you feel that being a fan of (name of team was inserted here) helps you establish new friendships?," "To what extent does being a fan of (name of team

was inserted here) football provide you with the opportunity to spend time with your friends?," "To what extent does being a fan of (name of team was inserted here) football provide you with the opportunity to maintain meaningful social relationships with others?," "To what extent does being a fan of (name of team was inserted here) football provide you with the opportunity to form a bond with your friends?," and "To what extent does being a fan of (name of team was inserted here) football provide you with the opportunity to feel a sense of commonality (i.e., having something in common to share) with your friends?" Response options to these items ranged from 1 (*does not help maintain friendships, does not help establish new friends, does not provide the opportunity*) to 8 (*very much helps maintain friendships, very much helps establish new friends, very much provides the opportunity*). Thus, higher numbers reflected greater levels of establishing and maintaining social connections from an association with the team. These six items were combined to form a "Likert-scale Items" index. Wann, Waddill, et al. (2011) found that each of the three aforementioned scales were reliable (Cronbach's alphas: Percentage of Friends = .923; Number of Friends = .604; Likert-scale Index = .958).

The third section of the questionnaire packet contained the seven-item, Likert-scale format Sport Spectator Identification Scale (SSIS; Wann & Branscombe, 1993) targeting the high school's football team. This reliable and valid scale (see Wann et al., 2001) has been used in dozens of studies and has been translated into multiple languages including Portuguese (Theodorakis, Wann, Carvalho, & Sarmento, 2010), Dutch (Melnick & Wann, 2004), and French (Bernache, Bouchet, & Lacassagne, 2007). A sample item read, "How much do you see yourself as a fan of (target team)?" Response options ranged from 1 (*low identification*) to 8 (*high identification*). Thus, higher numbers represented greater levels of team identification.

The fourth and final section contained the five-item Satisfaction with Social Life Scale (SSLS; Wann & Pierce, 2005). This reliable and valid Likert-scale was based on the Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985). A sample item read, "I am satisfied with my social life." Response options ranged from 1 (*strongly disagree*) to 7 (*strongly agree*). Thus, higher numbers represented greater levels of satisfaction with one's social life.

After completing the questionnaire packet (approximately 15-20 minutes), participants were debriefed and excused from the testing session.

Results

Preliminary Analyses

Items on the Percentage of Friends, Number of Friends, Likert-scale Index, SSIS, and SSLS were summed to form indices for each scale. Potential ranges, means, standard deviations, and Cronbach's alphas for all scales appear in Table 1 (all

scales had acceptable reliability). Gender differences were examined for each measure using a series of one-way ANOVAs. These analyses failed to reveal any significant differences for identification, social life satisfaction, or any of the three measures of social connections. A series of one-way ANOVAs examining year in school and whether or not the participant played in the marching band also failed to reveal any significant differences on the scales. Thus, all subsequent analyses were collapsed across gender, year in school, and membership in the band.

However, differences were found between participants who were members of the football team ($n = 22$) and those who were not ($n = 155$). Specifically, a series of ANOVAs revealed significant differences for Percentage of Friends [$F(1, 175) = 10.91, p < .001$], Number of Friends [$F(1, 175) = 10.38, p < .005$], Likert-scale Index [$F(1, 175) = 33.62, p < .001$], and team identification [$F(1, 175) = 46.66, p < .001$]. Participants who played on the football team reported higher scores for Percentage of Friends ($M = 153.77$, $SD = 49.48$), Number of Friends ($M = 75.23$, $SD = 67.91$), Likert-scale Index ($M = 41.50$, $SD = 6.75$), and identification with the football team ($M = 53.05$, $SD = 3.89$) than persons who were not on the team (Percentage of Friends $M = 108.22$, $SD = 61.91$; Number of Friends $M = 39.08$, $SD = 46.11$; Likert-scale Index $M = 25.92$, $SD = 12.33$; identification $M = 33.01$, $SD = 13.61$). There was no difference in SSLS scores ($F < .30, p > .50$) as a function of whether the participant was a member of the football team. Because those on the football team differed from those not on the team on the majority of measures, membership on the football team was incorporated into the analyses described below.

Identification and Connections

Correlations among the variables appear in Table 2. Hypothesis 1 stated that level of team identification would be positively correlated with social connections. As revealed in the table and consistent with results reported by Wann, Waddill, and colleagues (2011) on college fans, the hypothesis was supported for each assessment of connectedness (all rs > .50, all ps < .001). Compared to adolescents with lower levels of team identification, participants with higher levels of identification with the target high school team reported that a greater percentage and number of their friends were fans of the team and they were more likely to believe that they had the opportunity to maintain and establish friendships by being a fan of the team.

However, as noted above, membership on the football team was also related to the measures of connectedness as team players reported greater connections on each of the measures. Thus, we conducted a series of three simple regressions in which level of identification and membership of the football team (coded as 1 = yes, 2 = no) served as predictors of the three measures

of connections. The first regression targeted the Percentage of Friends scale. This analysis revealed that the combined effect of the two predictor variables was significant, $F(2, 174) = 75.61, p < .001$ ($R = 0.862$; $R^2 = 0.465$; adjusted $R^2 = 0.459$). With respect to independent contributions, as hypothesized (Hypothesis 1) team identification accounted for a significant proportion of unique variance in the percentage of friends who were fans of the team ($t = 11.50, p < .001$; $B = 3.099$; $SE\ B = 0.270$; $Beta = 0.717$). Membership on the football team was not a significant independent contributor ($t = 1.39, p > .15$; $B = 16.355$; $SE\ B = 11.738$; $Beta = 0.087$).

The second regression involved the Number of Friends scale and the combined effect of the predictors was again significant, $F(2, 174) = 29.44, p < .001$ ($R = 0.503$; $R^2 = 0.253$; adjusted $R^2 = 0.244$). With respect to independent contributions, as predicted (Hypothesis 1) identification accounted for a significant proportion of unique variance in the number of friends who were fans of the team ($t = 6.77, p < .001$; $B = 1.752$; $SE\ B = 0.259$; $Beta = 0.499$). Once again, membership on the football team was not a significant independent contributor ($t = -0.10, p > .90$; $B = -1.153$; $SE\ B = 11.265$; $Beta = -0.008$).

The third regression examined the Likert-scale Index. This analysis found that combined effect of the predictors was again significant, $F(2, 174) = 165.81, p < .001$ ($R = 0.810$; $R^2 = 0.656$; adjusted $R^2 = 0.652$). With respect to independent contributions, as expected identification accounted for a significant proportion of unique variance in perceptions of maintaining and establishing friendships by being a fan of the team ($t = 15.82, p < .001$; $B = 0.708$; $SE\ B = 0.046$; $Beta = 0.792$). And yet again, membership on the football team was not a significant independent contributor ($t = -0.76, p > .40$; $B = -1.485$; $SE\ B = 1.943$; $Beta = -0.038$).

Identification, Connections, and Well-being

Hypothesis 2 predicted a positive correlation between identification with the high school football team and social well-being (defined as satisfaction with one's social life). Consistent with expectations and past research among high school students (Wann et al., in press), identification and satisfaction were significantly and positively correlated, $r(177) = .19, p < .01$.

We next investigated the prediction (Hypothesis 3) that the relationship between team identification and social life satisfaction was at least partly accounted for (i.e., mediated) by social connections (because membership on the football was not found to account for a significant proportion of variance in the aforementioned regression analyses, this variable was not included in the equations). Three initial requirements must be met for evidence of mediation (Baron & Kenny, 1986): a significant relationship between the predictor (team identification) and the mediator (social connections); a significant

relationship between the predictor (team identification) and the dependent variable (social life satisfaction); a significant relationship between the mediator (social connections) and the dependent variable (social life satisfaction). If any of these conditions are not met, then mediation does not exist. Conversely, if each of these criteria is met, then one can test the effect of the mediator on the relationship between the predictor and dependent variables. The relationship between number of friends and social life satisfaction was not significant; therefore this connection variable was not included in the mediation analysis. The remaining set of variables (identification, Percentage of Friends, Likert-scale items, and social life satisfaction) did satisfy all of the criteria and were further evaluated for mediation effects. Although the direct relationship between identification and social life satisfaction was significant (b = .194, t = 2.61, p = .01), Sobel's tests (Baron & Kenny, 1986) indicated that, contrary to expectations, this relationship was not significantly mediated by either Percentage of Friends (indirect effect b = .105, z = 1.59, p = .113) or the Likert items (indirect effect b = .009, z = 0.098, p = .922).

Although the relationship between team identification and social life satisfaction was not accounted for by social connections, it remained possible that the relationship between identification and social life satisfaction differed as a function of varying amounts of social connections. Thus, a moderated regression analysis was executed. Measures were converted to z scores prior to these analyses, a process that obviated the need to center the predictor variables before conducting the moderated regression analysis (Aiken & West, 1991). Interaction terms were established between identification and each social connection variable. These interaction terms, along with the individual predictors (identification, Percentage of Friends, Number of Friends, Likert items) were entered into the model with social life satisfaction serving as the dependent variable. The results indicated that none of the interaction terms were significant predictors of social life satisfaction (largest b =.17, t = 1.49, p = .138).

Based on the aforementioned analyses, it appears that the relationship between team identification and social life satisfaction is neither mediated nor moderated by social connections. Therefore, a final set of analyses examined the direct relationship between identification and social connections via a multivariate regression analysis. This analysis revealed that team identification was a significant predictor of the set of combined social connection variables, Wilks' lambda = 0.301, multivariate F = 134.16, $p < .001$. Univariate results indicated that, compared to persons with lower team identification, persons with greater team identification reported having more friends who were strong and involved fans (b = 0.50, t = 7.69, $p < .001$), having a greater percentage of their friends who were strong and involved

fans ($b = 0.68$, $t = 12.18$, $p < .001$), and perceiving greater social benefits from being connected to their target team ($b = 0.81$, $t = 18.22$, $p < .001$).

Discussion

The purpose of this investigation was to further examine the relationships among sport team identification, social connectedness, and social psychological health. Consistent with the team identification – social psychological health model (Wann, 2006c), previous work had found that team identification was positively correlated with social psychological health (e.g., Branscombe & Wann, 1991; Phua, 2012; Reding et al., 2011) and the establishment and maintenance of social connections (e.g., Clopton, 2008; Clopton & Finch, 2010, Kelley & Tian, 2004). However, prior work had focused almost exclusively on college-aged samples and previous efforts regarding the patterns of relationships among the variables did not support all phases of the model (Wann et al., 2011). Thus, we replicated and extended past research by examining the fandom of high school students and further investigating the interrelationships among the key components of the model.

Hypothesis 1 predicted that level of team identification would be positively correlated with social connections generated via the team. Consistent with research on college-aged fans (Wann et al., 2011), the results supported expectations, as identification was positively associated with each of the connection measures. That is, among the adolescent sample tested here, higher levels of identification with one's high school team corresponded with a higher number and percentage of friends who were fans of the team and the Likert-scale index assessing the extent to which participants believed their fandom for the team assisted in establishing and maintaining connections with others. Thus, the current work reveals that the previously established relationships among sport team identification and social connections extends to younger fans in a scholastic sport setting.

Hypothesis 2 predicted that there would be a positive correlation between identification with the high school football team and satisfaction with one's social life. As expected and consistent with past research testing high school students (Wann et al., in press), identification and satisfaction were significantly and positively correlated. Thus, identification was positively associated with both social connections and social well-being. Preliminary analyses indicated that membership on the football team was also correlated with social connections and well-being as those on the team reported higher levels of both. However, regression analyses indicated that it was identification rather than membership on the team that was the critical predictor variable. This substantiates past research also finding that it was one's psychological connection to a

team, not membership on a team, that was most vital (Wann et al., in press).

Although we were interested in the aforementioned simple relationships between team identification and both social connections and well-being, the primary purpose of the current investigation was to examine the interrelationships among these variables. Based on the TI-SPHM (Wann, 2006c), we predicted that the relationship between team identification and social life satisfaction would be mediated by social connections. However, the results failed to support this pattern of effects. Rather, team identification was found to have a direct effect on social connectedness as well as social life satisfaction. Interestingly, this is precisely the pattern of effects reported by Wann, Waddill, and their associates (2011). These authors concluded that modifications to the model may be needed and, given that the current investigation replicated their pattern of effects, modifications consistent with these studies appear to be necessary.

Combining the current data with those reported by Wann, Waddill, et al. (2011), there appear to be two logical changes that could be made to the model. First, it may simply be that mediation is not a part of the interrelationships among identification, connections, and well-being. Rather, as found in the current data set and by Wann, Waddill, et al., team identification may simply have a direct effect on both connections and social psychological health. Thus, fans with higher levels of identification will have both greater connections generated via the team and more positive social well-being, but the latter two are not related in a mediational form.

However, a second possibility is that both the current study and the work of Wann, Waddill, et al. (2011) failed to adequately assess the "social connectedness" variable. This perspective has recent empirical support in work by Inoue, Funk, Wann, Yoshida, and Nakazawa (in press). These authors also examined the relationships among identification, connections, and social well-being. However, rather than simply assess amount of connections (e.g., number, percent) as was done here (and in Wann, Waddill, et al., 2011), these investigators assessed perceptions of instrumental and emotional support. Their research examined participant responses in the aftermath of the Great East Japan earthquake occurring in March, 2011. Spectators of local Japanese professional soccer teams completed scales assessing their identification with the local team, perceptions of post-disaster instrumental and emotional support, and perceptions of post-disaster community cohesion (a component of social well-being, see Keyes, 1998). The results indicated that, as expected and consistent with the TI-SPHM (Wann, 2006c), identification was positively correlated with community cohesion. More importantly, however, emotional support mediated this relationship, thus providing evidence of the patterns of effects predicted

by Wann's model (no such relationship was found for instrumental support). Thus, the work by Inoue and his associates suggests that the framework hypothesized by Wann (2006c) is valid, but that the key mediating variable is perceived emotional support rather than amount of connectedness.

Suggestions for Future Research

When combined with previous efforts, findings from the current investigation lead to several suggestions for future research. First, it would be useful to replicate the findings reported by Inoue et al. (in press) with adolescent fans (their work tested an adult population with a mean age of slightly over 39 years).

Secondly, future researchers should consider investigating the relationships among all four variables: team identification, amount of connectedness (as in the current research and Wann, Waddill, et al., 2011), perceptions of emotional support (as in Inoue et al., in press), and social well-being. That is, given that amount of connections has consistently been found to correlate with team identification, it seems premature to fully dismiss the potential importance of this variable. Rather, future investigations should include both amount of connection and perceptions of emotional support to see how the inclusion of both may impact the pattern of effects.

It would also be valuable to conduct additional research examining identification with a different high school sport. Both the current study and the work conducted previously by Wann and associates (in press) focused on high school football. Although football is often a popular high school sport (especially in certain areas of the country such as Texas), other sports can have large fan bases (e.g., high school basketball in Indiana). Research on college and adult populations has found that social well-being is positively correlated with identification with teams playing a variety of sports including baseball (Wann, Keenan, & Page, 2009), basketball (Branscombe & Wann, 1991; Wann & Weaver, 2009), and Australian Rules football (Wann, Dimmock, & Grove, 2003). Future investigations should attempt to confirm the team identification – well-being relationship with these and other high school sports. In addition, authors may want to investigate identification with female high school sport teams because, to date, there do not appear to be any empirical studies examining the relationship between team identification and social psychological health for women's teams (at any level of competition).

Additionally, researchers should consider extending the current work to even younger populations. Combining the current work with previous studies (e.g., Wann et al., in press; Wann, Rogers et al., 2011; Wann & Weaver, 2009), the positive relationship between identification with a local sport team and social psychological health has been established with individuals ranging in age from adolescent to late adulthood. However, individuals are socialized into fandom at a very early age

and many can identify a favorite team before reaching high school (Wann et al., 2001). Based on his research on the development of team loyalty, James (2001) concluded that "children form preferences for sport teams early in life" and that "they are capable of forming a commitment to a sports team as young as age 5" (p. 233). In fact, a study of National Football League fans found that over one-third of respondents chose age "0" as the starting date for their team fandom (James, Walker, & Kuminka, 2009). Additionally, Gardikiotis, Tsigilis, Theodorakis, and Kyriakopoulos (2014) found that the need to belong was a significant predictor of team identification in elementary school children, many of whom had high levels of identification with their favorite sport team. Given that children can develop a sense of team identification at a young age and issues such as social well-being, connections to others, and self-esteem are critical for this group (Bigler, 1995; Harter, 1993; Wigfield & Eccles, 1994), an examination of the relationships among team identification, social connections, and social well-being for younger children is warranted. Once they have assessed the team identification, social connections, and social well-being of a young sample (e.g., elementary school children), researchers should consider conducting longitudinal research with this group of participants. That is, once the younger sample has been established, it could be re-tested over several years (e.g., during middle school, high school, and college) in an attempt to detect changes in the relationships among the variables across time. Further, this approach would allow for a cross-lagged methodology and potentially provide critical information on possible causes patterns among the variables (e.g., Wann, 2006b).

Yet another possible avenue for future research could combine the results of the current investigation with work by Heere and his colleagues. Recently, Here and James (2007) presented a theoretical framework predicting that team identification will be related to identification with external organizations (e.g., demographic, vocational, religious, political). Essentially, these authors argue that a fan's identification with a team does not occur in a vacuum. Subsequent research has substantiated their position. For instance, Heere et al. (2011) found that identification with collegiate football teams was significantly associated with identification with other communities, such as with the university as a whole and with the city in which the school resides. Similar results were provided by Heere, James, Yoshida, and Scremin (2011). Given that team identity is associated with other communities (e.g., Heere & James, 2007) and given that team identification is related to both social connectedness and social well-being (e.g., the current research), it would be interesting to investigate the interrelationships among these variables in amateur settings. That is, it may be that identification with larger communities (e.g.,

the high school as a whole and/or the city in which the school in found) may also influence well-being. Perhaps identification with larger communities provides a complementary source of connections and well-being or maybe team identification with amateur teams moderates the potential relationships between identity with the larger communities and social psychological connections and health. Additional research should be conducted to investigate these possibilities.

And finally, although not directly related to the focus of the current investigation, researchers may want to investigate differences and similarities among high school student-fans and players with respect to their relationships with the team, other fans and players, and well-being. For instance, it would be interesting to determine if the patterns found above also extend to athlete identity (Brewer, Van Raalte, & Linder, 1993) among the players. Such an investigation may provide additional insight into the relationship between participation in youth sports and potential psychological benefits such as self-esteem enhancement (Kamal et al., 1995; Taylor & Turek, 2010).

Limitations

Several limitations of the current investigation warrant mention. First, as noted above, the current study only examined identification with a football team. Thus, future investigations should extend our work to other high school sports to test the generalizability of the findings reported here. Second, the current work tested only one sample from a single school, a small, public high school in the mid-south. Subsequent investigations are needed that test students attending other schools. In particular, additional work is needed on subjects from private schools as well as schools with larger enrollments (and, presumably, larger sport programs). Third, due to a limitation in participant availability on the day of testing, only sophomores and seniors were available for participation. However, it is possible that a student's grade classification could be related to his or her interest in the football team and, subsequently, impact the relationships examined in the current work. For instance, given that they are new to the school, freshmen may be particularly likely to utilize the football team as a method of gaining connections to others. Further, because of their repeated exposure to the team through multiple seasons, juniors and seniors may be particularly likely to strongly identify with school teams. Thus, future research should include students from all grade levels and include this subject variable in the analyses. Fourth, in the current investigation we included membership in the band as a potential important variable. Although participation in the band was not found to be related to the variables of interest, other team support groups may be important and should be studied in subsequent investigations. These groups include, but

are not limited to, spirit team members, cheerleaders, and members of dance teams.

An additional limitation can be found in the past performance of the target high school football team. As noted above, the target team had experienced a great deal of success in recent seasons. Thus, researchers should expand the current study by investigating adolescent identification with less successful teams. Interestingly, research with college students (and identification with local college teams) indicates that team success is not critical for the establishment of the identification – well-being relationship. Rather, this positive correlation is also found among persons identifying with less successful teams (Wann et al., 2009). However, it would be important to document that this pattern of effects also is found among younger fans.

And finally, it is important to note that social well-being was only operationalized in one way, namely, satisfaction with one's social life. Life satisfaction is a valid component of subjective well-being (Diener et al., 1985). However, social well-being is multidimensional and can be assessed in numerous ways (Keyes, 1998). Thus, future researchers should attempt to replicate the findings reported here with additional assessments of social psychological health (e.g., loneliness, alienation, social self-esteem, social cohesion, etc.).

Conclusion

Researchers have consistently found positive correlations between team identification and social psychological health (Wann, 2006c) and between identification and social connections (e.g., Clopton, 2008; Clopton & Finch, 2010; Wann, Waddill, et al., 2011). Based on the team identification – social psychological health model (Wann, 2006c), the current investigation attempted to replicate these relationships with an adolescent sample and to investigate the intercorrelations among the variables. As expected, team identification was positively related to both social well-being and the establishment and maintenance of social connections, thus extending past work to a younger sample. However, social connections did not mediate the relationship between identification and well-being, as predicted by the model. Subsequent research should further investigate the relationships and, if necessary, make appropriate refinements to the model.

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Tables

Table 1

Potential Ranges, Means, Standard Deviations, and Cronbach's Reliability Alphas for the Dependent Measures.

Measure	*Potential Range*	*Mean*	*SD*	*Alpha*
Percentage of Friends	0 to 200	113.88	62.23	.875
Number of Friends	0 to N/A	43.58	43.58	.876
Likert-scale Index	6 to 48	27.85	12.83	.960
SSIS	7 to 56	35.55	14.40	.939
SSLS	5 to 35	27.33	6.20	.899

Table 2

Intercorrelations among Percentage of Friends, Number of Friends, Likert-scale Index, Team Identification, Social Life Satisfaction, and Membership on the Football Team

	1	2	3	4	5	6
Percentage of Friends (1)	--					
Number of Friends (2)	.46***	--				
Likert-scale Index (3)	.65***	.51***	--			
Team Identification (4)	.68***	.50***	.81***	--		
Social Life Satisfaction (5)	.22**	.10	.16*	.19**	--	
Member of Football Team (6)[1]	-.24***	-.24***	-.40***	-.46***	-.04	--

Notes: [1]Member of football team coded as 1 = yes, 2 = no. * = $p < .05$; ** $p < .01$; *** = $p < .001$.

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Health Culture and Running: Non-Elite Runners' Understandings of Doping and Supplementation

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National Development and Research Institutes

Participants at the non-elite level of road running often take up the sport for purposes of health, as a way of taking responsibility for their own well-being. Often, these runners use dietary supplements as a way to improve health and to potentially enhance running performance. Supplements are distinct from banned performance enhancing drugs (PEDs), as they are legal and widely available, though very loosely regulated. Research demonstrates that the line between supplements and banned PEDs is increasingly blurry as cases of cross-contaminated and mislabeled supplements continue to be found. Such products may pose health risks to unsuspecting consumers. Despite anti-doping agencies' warnings to elite runners about these risks, non-elite runners are rarely told by any sport or anti-doping body to be wary of supplements. They are, however, inundated with media coverage of doping scandals usually involving only a few of the substances banned in sport. In short, these runners are often left to navigate supplement use on their own and many conflate supplement availability with safety. This article explores these routine dietary supplement practices among non-elite runners. Drawing from interviews with 28 non-elite runners in New York City, I discuss the perceptions and understandings of doping and dietary supplement use within the context of health culture. Interview data reveal that the social acceptance of dietary supplements and their widespread use among the broader public reinforce the notion among non-elite runners that such products are objectively safe and healthy. I argue that based on their assumptions of supplement safety, non-elite runners view dietary supplements as distinctly different from PEDs and that this difference encourages their use as health and performance aids.

Road running is a continually growing sport, especially at the amateur or non-elite level where the majority of runners compete. In 2014, Running USA (2015) reported 18.75 million runners finished road races of all distances. This was a 1% decrease from 2013. This year over year decline was rare, as road running participation increased by 300% between 1990 and 2013 (Running USA, 2015). Road races are unique from other sporting events in that the elite and non-elite racing fields run concurrently on the same course. It is the runners at non-professional levels of road racing—specifically those at the competitive, non-elite level—who are the focus of this article.

These runners exist within a healthicized context that increasingly links health and lifestyle choices with morality—healthy individuals are good by virtue of the effort they put into their health, while unhealthy individuals are bad due to poor decision-making (Conrad, 1994). Running is one way to manifest a commitment to a healthy lifestyle and demonstrate making good choices—it acts as an enhancement to one's health. Evidence of running as a healthy lifestyle can be found in running magazines, such as *Runner's World*, and mainstream media, including the *New York Times*. These include reports of research studies demonstrating the ways running can keep us young (Reynolds, 2014; Roberts, 2015), that runners are generally healthier than non-runners (Hutchinson, 2015), and even that running has health benefits for runners' non-running spouses (Well, 2014). Running for wellness or fitness signals an individual has acknowledged an understanding of the risks of sedentary lifestyles and inactivity and the benefits it can confer, has accepted recommendations of health experts, and is taking responsibility for managing her or her own risk (Shipway & Holloway, 2010; Shipway, Holloway, & Jones, 2012). In this context, running shifts from pleasure or leisure to a process of health. This process is not necessarily focused around achieving a measurable racing outcome. Rather, health is a process that constantly pursues better health by accepting and applying recommendations of those that are considered experts on health or training.

While running may act as an enhancement to one's health, as a physical activity it may also be enhanced in a variety of ways. Runners have a range of choices for enhancing running, ranging from getting more sleep to cross-training to using dietary supplements to using banned performance enhancing drugs (PEDs). In this article, I use the term *supplement* in reference to all products included in the National Institutes of Health's (NIH) definition of a dietary supplement. The NIH defines dietary supplements using the four-part definition in the 1994 Dietary Health and Supplement Education Act. Accordingly, a dietary supplement "is intended to supplement the diet; contains one or more dietary ingredients (including vitamins; minerals: herbs or other botanicals; amino acids; and

other substances) or their constituents; is intended to be taken by mouth as a pill, capsule, tablet, or liquid; and is labeled on the front panel as being a dietary supplement" (NIH, 2011). This definition includes vitamin and minerals in pill form, as well as athlete-oriented products such as electrolyte replenishing drinks and gels. Each of the available enhancement options may be more or less effective or efficient, yet runners do not necessarily view them based on their objective benefit to running. Within the healthicized context of running, individuals seek improvement with as little risk as possible, and decisions about enhancements have implications for their identities as health-seeking individuals. Any substance viewed as posing a risk to health, such as PEDs, is bad, while substances understood to promote health are good. However, this line between good and bad may be obscured through misunderstanding or incomplete information, marketing efforts, and the ways substances are regulated.

The line between what is allowed under anti-doping regulations and what is considered doping is increasingly blurred when considering dietary supplements. Most are legal and widely available, but unlike prescription products or banned substances, dietary supplements are not regulated in the U.S. (Cohen, 2012). Cross-contamination with substances not listed as ingredients—including those that are banned by anti-doping agencies—can make their way into common products found in local vitamin shops and pharmacies (Van Thuyne, Van Eenoo, & Delbeke, 2006). Pipe and Ayotte (2002) reported that the lax regulation of supplements has led to many substances of "dubious value, content, and quality" (p. 245) becoming widely available to the consuming public, including athletes. Many mistakenly assume supplements are regulated as rigorously as prescription medications, a finding consistent with a 2002 nationwide Harris Poll that found 59% of 1,010 respondents incorrectly believed the supplement industry was well-regulated by an agency such as the FDA (Harris Interactive, 2002). However, this mistaken view of supplements as safe and healthy leaves individuals who use them, including athletes, vulnerable to negative health outcomes from tainted or mislabeled products.

This article explores non-elite runners' views of routine dietary supplementation practices that do not necessarily fall under the definition of doping, but are encouraged within health culture. Here I discuss findings from interviews with non-elite runners about their views and understandings of PEDs and supplements with regard to health. I argue that based on their assumptions of supplement safety, non-elite runners view dietary supplements differently from PEDs and that this difference encourages their use as health and performance aids.

Review of Literature

Social scientists have noted the emergence of healthicization processes that forge a link between health and morality (Conrad, 1994). This "new health morality" (Becker, 1986 as cited in Conrad, 1994, p. 387) transforms health into a virtue, one that individuals in neoliberal societies are responsible for continuously working towards. Healthicization focuses on "lifestyle causes and behavioural interventions" (Williams, 2002, p. 85) to address social issues (i.e. cigarette smoking, obesity). Health is a goal that morally good members of society work towards through their personal choices and behaviors, guided by expert advice on the best ways to pursue health (Rose, 1999). To be healthy, individuals must constantly monitor their personal health risks in relation to their behaviors in order to make the obligatory correct choice (Rose, 1999). The result is a health culture wherein health is "both a goal and a source of anxiety, a value for self and others, integral to identity, a state of being that is continually assessed and the organizing concept for a vast organization of social action" (Crawford, 2006, p. 404).

As a result of healthicization processes, health and fitness have become increasingly commodified (Guthman & DuPuis, 2006). Contemporary health culture is underpinned by the imperative to health and acceptance that one's health is constantly at risk (Crawford, 2006). Within this culture the health market for wellness and self-improvement aids has expanded (Lavrence & Lozanski, 2014). The growing health and fitness industries offer a vast array of health products and services available for purchase and consumption, including fitness clothing, exercise gear, health and fitness publications, and dietary supplements (Ayo, 2012). Many health products are aimed at addressing "needs" related to anxieties over one's risk for various maladies that consumers are told can be mitigated by proper health and lifestyle choices (Isin, 2004). These aids offer a type of health "insurance" to consumers through behavioral changes and lifestyle choices intended to reduce their risk of illness or otherwise poor health (Ayo, 2012, p. 103). The expectation that individuals will consume health and lifestyle products is largely based on the assumption that individuals will choose to engage in activities that promote their own wellbeing (Rose, 1999).

Running and the running body assume particular meanings in a healthicized context where morality is bound up with health and fitness. Running, as with other forms of movement, can be transformative (Hochstetler, 2007). Gillick (1984, p. 384) argues that, beginning in the 1960's, running has become a way of "shifting responsibility for environmental change from society to the individual, and of redefining 'being ill' as 'being guilty.'" No longer simply a leisure pursuit, running has become a "health promotion activity" (Gillick, 1984, p. 383) that appealed "to the venerable notion of upright living as a means to personal and social renewal" (Gillick, 1984, p. 371).

Running, an example of "upright living", is part of body projects through which the moral goodness of the selves that are "dedicated, controlled, disciplined, culturally and economically invested in health and are self-responsible" (Shipway & Holloway, 2010, p. 275) are reflected on the healthy and fit bodies of runners.

Athletes focus on making what they understand to be correct health choices and avoid risk. Runners consume products they believe will make them faster, stronger, and healthier. Chief among these products are dietary supplements, which are commonly used among the U.S. population (Gahache, Bailey, Burt, Hughes, Yetley, Dwyer, Picciano, McDowell, & Sempos, 2011) but especially by athletes (Bailey, 2013; Baume, Hellemans, & Saugy, 2007; Suzic Lazic, Dikic, Radivojevic, Mazic, Radovanovic, Mitrovic, Lazic, Zivanic, & Suzic, 2011). Runners may view these choices as part of the process of being healthy (Henning, 2014). Dietary supplements do not carry the stigma of PEDs, which have been demonized as unhealthy, unethical, and immoral (López, 2013; WADA, 2015a). Choosing to use dietary supplements believed to offer performance or health enhancement is not necessarily based on the desire for a running-related outcome. Rather, it may be a choice that reflects the desire to pursue health by choosing the "healthy" alternative to PEDs.

Within our current health culture, the purchase and use of products to promote health—including dietary supplements—is not merely tolerated or accepted, it is encouraged (Lavrence & Lozanski, 2014). Daily use of these products could be understood as demonstrating an individual's commitment to health, as does avoiding banned PEDs and their potential health risks, though supplement use does not necessarily indicate one's level of commitment. Regardless of their widespread use, some substances used or found in supplements have been banned in sport as doping agents.

Regulation

WADA is the body responsible for determining what constitutes doping in sport and for overseeing the testing and enforcement of athletes around the world through national-level agencies, including USADA. WADA relies on three-pronged criteria to determine if a substance should be banned: 1) its performance enhancing potential, 2) its actual or potential risk to athlete health, and 3) whether or not it violates the "spirit of the sport" (WADA, 2015a). If a substance meets two of the three criteria it is placed on WADA's annually updated List of Banned Substances (WADA, 2015b). Illustrating the healthicized context in which these regulations are enforced, athletes are held to the "strict liability" standard that states, "it is not necessary that intent, Fault, negligence, or knowing Use on the Athlete's part be demonstrated by the Anti-Doping Organization in order to establish an anti-doping rule violation"

(WADA, 2015a). Athletes are responsible for whatever may be found in their system through an anti-doping test, regardless of how or why it is present.

Because the list is regularly altered and includes classes of substances (e.g. anabolic agents) as well as specific compounds (e.g. methyl-1-testosterone), athletes and other individuals may have difficulty navigating which substances are banned and where they may be found. Mottram, Chester, Atkinson, and Goode (2008) surveyed elite athletes on their knowledge of the current approach to banned substances and over-the-counter (OTC) products, finding that knowledge about what constitutes doping or an anti-doping violation varied greatly between the respondents. This variance existed despite their status as elites who are subject to both anti-doping efforts and education, and often have access to medical professionals who may offer guidance. Research with elite female triathletes found many lacked an understanding of the principles and procedures underlying the anti-doping process (Johnson, Butryn, & Masucci, 2013). Some of the misunderstandings around PEDs might be due to beliefs about certain types of drugs or modes of ingestion. For example, anabolic steroids and hGH are often thought to be used by bodybuilders to achieve an overly muscled aesthetic that is far outside the normative body type (Monaghan, 2001; Beamish, 2011). Additionally, injected drugs are linked to illicit drug users, a group widely considered deviant, and those who use heroin and crack—also associated with poorer populations than other illicit drugs—often face the greatest stigma (Ahern, Stuber, & Galea, 2007).

Compounding the problem of knowledge at the amateur level is that though WADA's rules and mission apply to all levels of sport, much of the educational programming and information is targeted only at the elite level of the sport. Athletes often rely on self-education through unofficial sources such as the media or Internet, even other athletes (Erickson, McKenna, & Backhouse, 2015; Johnson, Butryn, & Masucci, 2013). Those at lower levels, such as the large and growing number of amateur runners, are technically governed by the rules but are rarely, if ever, tested for or formally educated about any potentially harmful or enhancing substances. Yet, they continue to bear the responsibility for managing their health risks and of continuing to work towards an ever-healthier lifestyle.

Much debate around the regulation of substances in sport centers on health risk to the athlete. However, as Gleaves (2010) argued, there are reasons outside of health risk that some substances should be banned from sport, including protecting the continuity of, and the meaning derived from, the contesting of sport and maintaining the internal goods individuals derive from the process of engagement in sport. Further, because the rules of the sport prohibit some substances, their use

may also be seen to violate the social contract—the "implicit consensual agreements between participants stating their shared interpretation and interest" (Harviainen & Lieberoth, 2001, p. 529)—that athletes enter when competing. The question becomes more complex when moving outside of overtly banned substances and into the topic of dietary supplements.

Supplements

Previous research on media and the supplement industry has argued niche and mainstream print and on-line media sources act as "robust sources for claimsmaking activities purported by sports nutrition supplement companies and industry experts" (Bailey, 2013, p. 1105). Manufacturers can make claims about what benefits their products offer as long as they carry a disclaimer that the Food and Drug Administration (FDA) has not verified the claims. Highly troubling is the lack of oversight with regard to negative side effects resulting from use of these products (Cohen, 2012) as a result of the 1994 Dietary Supplement and Health Education Act (DSHEA) that allowed supplement manufacturers to market products without first demonstrating their safety (U.S. Public Law 103-417, 1994). Prior to the DSHEA, these products were more tightly controlled by the FDA for both effectiveness and safety (for a review of supplement regulations before 1994, see Kaczka, 1999). Due to the current state of lax regulation, it is left to the individual to judge the health risk and reward of supplements. At the same time healthist demands compel them to "choose" health and lifestyle aids, partly because it is "expected that prudent and responsible individuals will embrace the goods and services offered by the flourishing health industry as part of their reasonable service to themselves" (Ayo, 2012, p. 103).

The health risks of supplements are not unknown to all stakeholders in sport. Anti-doping agencies have also issued warnings to athletes to beware of supplements, and USADA (2014) has a page on its website dedicated to the risks of supplements and a search function to determine if a product or substance has been banned. This is a passive service, however, requiring the athlete to proactively seek out information about the risks of supplements. In their review of studies on supplements used by athletes, Baume, Hellemans, and Saugy (2007) note that athletes believe in the potential enhancing effects of supplements and use them for performance purposes. One study of Serbian athletes found that 74% reported regular use of at least one supplement or OTC medication; 21.1% reported using six or more such products (Suzic Lazic et al., 2011). It is likely similar results would be found among American athletes given the widespread use of supplements and OTC medications among Americans generally.

Use of these products, though legal, can present some ethical dilemmas for athletes and regulators. A full review of the vast

literature on the ethical debates around performance enhancement in sports is outside the scope of this article. However, much research has been conducted on many aspects of sports ethics and philosophy regarding topics including: the ethics of performance enhancement (e.g. Gleaves, 2010; Veber, 2014), the ethics of doping and anti-doping (e.g. Culbertson, 2005; Møller, 2009), fairness and sport (e.g. Carr, 2008), technology and sport ethics (e.g. Culbertson, 2009; Konig, 1995; Miah, 2004). Research with elite amateur cyclists—those amateurs closest to the professional ranks—found that some athletes drew comparisons between non-harmful PEDs and supplement use and empathized with professionals who compete as their livelihood (Outram & Stewart, 2015). Indeed, researchers have argued that dietary supplements may act as "gateways" to doping for at-risk athletes (Backhouse, Whitaker, & Petróczi, 2013); that media emphasis and attention to the supposed enhancing benefits of supplements may provide the basis for choosing a supplement product, rather than medical or scientific guidance (James, Naughton, & Petróczi, 2010); and that contaminated substances may lead to positive doping tests (de Hon & Coumons, 2007). Athletes, then, are caught between the healthist demands to use products that support their healthy, active lifestyles and the morally-laden imperative to avoid illness and the use of banned PEDs. Further, the slow pace of regulation of supplements means potentially dangerous substances can be accessed by at-risk groups (Denham, 2011). Evidence of how lax oversight of these products is found in the report by researchers that a methamphetamine analog was detected in the popular workout supplement Craze, undertaken by the authors after athletes tested positive for the banned stimulant in doping tests (Cohen, Travis, & Venhuis, 2013). While the authors note that athletes may inadvertently use a banned substance for which they would be responsible for under the strict liability principle, the greater concern is the unknown effects of this analog on the athletes who use it, as tests on humans of this stimulant have never been performed (Cohen, Travis, & Venhuis, 2013).

Though supplement manufacturers in the United States are required to report adverse events of supplements to the FDA, Cohen (2009) found that as many as 50,000 adverse events are estimated to occur annually but relatively few are reported, meaning a potential recall could not be issued. Harel, Harel, Wald, Mamdani, and Bell (2013) found that recalls are not necessarily carried out even when the FDA confirms contaminated supplements, meaning many supplements present health risks to athletes who may equate availability with safety. Maughan, Greenhaff, and Hespel (2011) warn that as athletes become more and more desensitized to taking and using supplements, it becomes imperative that they exercise caution in order to minimize health risks—especially when

using the types of novel supplements that lack institutional regulation on their safety. Again, the demands and responsibility to manage risk while pursuing an active, healthy lifestyle are squarely on the athletes themselves.

Methods

This qualitative study's approach generally coincided with grounded theory procedures and sought to understand the ways the participants viewed and experienced performance enhancement, both legal and non. As a member of the New York City running community as a runner and, later, a coach, it was necessary for me to bracket my own views, experiences, and assumptions of performance enhancement throughout the research and analysis process (Charmaz, 2006; Tufford & Newman, 2010). This process of setting aside one's own biases in order to remain open to new or challenging information and issues allows for a more impartial analysis of the data. Rather than relying on my preconceptions, bracketing these out enabled me to gain a deeper understanding of the topic and participants.

Data were drawn from semi-structured interviews with New York City-based non-elite runners that were the basis of a larger project on non-elite runners, performance enhancement, and health. In New York City, the premier racing organization is New York Road Runners (NYRR), a non-profit organization that is responsible for directing the world's largest marathon and the largest membership. NYRR also hosts more than 50 racing events per year, though only a handful feature doping control testing. Often, these events also have no division between sexes or age groups during the event, though in many races prizes are awarded to winners of sex and age groups. Every participant in NYRR races must agree to follow the rules of competition as laid out by United States Track and Field, including anti-doping rules laid out by World Anti-Doping Agency (WADA) and enforced by the United States Anti-Doping Agency (USADA). Though runners must agree to abide by anti-doping regulations in order to participate they are generally given no further explanation or information about these rules other than a link to the governing bodies' websites.

Affiliation with or membership on a NYRR-governed club team was a prerequisite for participation. This requirement ensured the runners interacted at least minimally with other members of the local running community, had a motivation to race regularly as club teams compete for points in specific races throughout the year, and ensured that these participants had agreed to follow the rules of competition that include anti-doping regulations when registering for a NYRR race.

Compared with the demographic patterns documented by Running USA (2015) in road running generally, the participants in this study are similar in the following ways: only two of the runners in

this study were non-white, all were middle or upper class, urban residents, and all but one had attended college. Participants ranged in age from 25 to 56, and 19 males and nine females were included. Most of the participants identified exclusively as runners, though some also identified as multi-sport athletes such as cyclists, triathletes, or swimmers. The sample diverged from broader road running patterns along the lines of sex and competitiveness. In general, more females than males participate in road running though this sample has almost twice as many male participants than female. This may be related to gendered notions of competitiveness, as studies of the gendered roles in sport have shown that female athletes are generally portrayed as cooperative while males are competitive (Daddario, 1994) and that males are expected to be competitive athletes while women are not (Cuneen & Claussen, 1999). Recruitment was based on referrals from other competitive athletes and it is possible that the "competitive" descriptor resulted in runners viewing male non-elite runners as more appropriate for the study than females.

The competitive descriptor was included in an effort to limit the sample to a manageable size and recruit a sample that was similar in its type of participation. Runners may participate in their sport in various ways, including those who race with a focus on the performance, those who race for reasons other than performance (i.e. fun, social connection, personal "bucket" list experiences), and those who choose to forgo racing altogether. By recruiting only "competitive" runners, I was able to recruit a sample that included team-affiliated runners who trained and raced with goals related to improving performances or meeting specific personal goals. In my recruitment materials, I did not define "competitive" other than to specify the person must be active and run for a NYRR-affiliated team. I did not limit the sample by number of races run or number of years the individual had been running, as many competitive runners may focus on a small number of races per year or have recently begun running for performance. Since runners may meet the team membership and performance-centered racing requirements and still not place well at a races or be objectively successful relative to others, there was no requirement for how well a runner ranked within his or her own age group to be part of the sample. I also did not limit the sample to those who had knowledge of anti-doping policies and procedures, or of doping in general. The study was not intended to test how well non-elite runners understand anti-doping policies. Rather, the goal of the study was to explore how runners who compete seriously, yet are largely left out of the anti-doping process, perceive doping and other performance enhancement and the ways in which they negotiate these issues in their own training.

Early in the data collection it became clear these athletes race quite seriously and

many were relatively successful non-elite runners both within and outside of the New York City running scene. These runners represent a population different from both elite and less competitive non-elite runners. These runners rarely win races outright, but several consistently finish at the top of their respective five year age groups and others have raced across road racing distances as sub-elite runners—a distinction given to the tier of runners above the local competitive but below the professional elites. While this does limit the generalizability of the study, it does offer a view into the world of competitive, non-elite running.

Interview participants were recruited through a network sampling process beginning with my own position within the running community and working outward to up to five degrees of separation from myself. This distance from myself ensured participants differed from the initial participants that were from my own personal network and to provide a sufficient sample of the population, reducing the bias often found in snowball samples (Semaan, Lauby, & Liebman, 2002). As a condition of taking part in the study, each participant provided contact information of any three non-elite runners who fit the study criteria, detailed above. Using this information I contacted each runner via email notifying him or her that another runner who had taken part in the study had recommended them for participation. This recruitment strategy resulted in 45 invitations to participate, from which 28 individuals agreed to take part in a semi-structured interview.

The semi-structured interview provided a map for the interview to follow, and also allowed for flexibility during the interview (Schensul & LeCompte, 1999). This flexibility enabled asking follow-up questions or for elaboration on a related point not specifically addressed by the question. Following a prepared guide, I asked participants about their experiences with and perceptions of health, doping, and supplements, and their motivations for training and racing. In addition to basic demographic questions (e.g. age, profession), each participant was asked 17 standard questions that could then followed-up with non-standard questions based on the response. The standard questions were based on existing literature around the topic of doping. Based on literature demonstrating professional and semi-professional athletes' lack of knowledge of doping and anti-doping policies and procedures (Mottram, Chester, Atkinson, & Goode, 2008), I avoided questions asking about specific definitions or policies in favor of those about their perceptions (i.e. "How do you define doping?" "Do you consider all performance enhancement to be doping? Why or why not?" "Do you consider all forms of cheating or dishonest participation the same? Why or why not?"). Due to the documented effects of socially desirable responding when asked about doping (Petróczi & Nepusz, 2011), I avoided direct

questions about their own use of PEDs or of knowledge of their peers' doping. The questions instead focused on hypothetical situations and questions about running in general (i.e. "Why do you think a runner would choose to dope?" "How pervasive do you think doping is at all levels of running?" "What would you do if you knew of a runner who was doping?"). While the questions would not yield any prevalence data for PED or supplement usage, they were geared towards the perceptions and experiences of the athletes themselves.

Data analysis followed the procedures of grounded theory (Charmaz, 2006) wherein concepts and theory are developed through data coding and analysis. The audio-recorded interviews were transcribed and data then coded using the qualitative analysis software Atlas.ti. An initial code list was developed based on the broad thematic categories around which the interviews were organized, including conceptualizations of doping, health, and ethics. The full code list was created through a second inductive and iterative coding process (Charmaz, 2006). Following the coding process, data were arranged into specific thematic categories, such as supplements, over-the-counter drug usage, and non-doping performance enhancement.

Because some of the participants mentioned the substances they use during their own training and racing cycles, the runners are presented here using pseudonyms to maintain confidentiality. As will be discussed below, the participants varied quite a bit in their knowledge of banned substances and supplements, as well as in their views of what substances are healthy. Both of these factors had implications for supplementation practices each undertook as part of their own healthy lifestyle.

Results

Knowledge

The dearth of knowledge in response to the question "what is doping?" underscored how unclear the line between performance enhancing supplements, which are at the center of anti-doping efforts in sport, and supplements was among participants. Carol, a 28 year old runner, noted that she frequently came across news of potential PEDs: "You read about things like so-and-so's coach told them to do this and it's not really a drug." Like Carol, many of the respondents' ideas were gleaned from media reports of elite athletes who had failed a doping test, the Internet, or from speaking with fellow runners and athletes about the latest doping scandal.

Several participants admitted that they were unclear on what doping was, such as 46-year-old Sam:

> On our level, the competitive athlete level, I'm not that cognizant of all the rules and drugs. I take caffeine, alcohol, and Advil. I'm pretty sure I'm not in violation, but I don't know. If a doctor prescribed eye drops and that's a steroid am I in violation? I don't know.

Beyond understanding doping as bad, risky for health, and to be avoided, these non-elite runners have very limited knowledge of the range of substances that are banned and the potential harms non-banned substances may present. Sam also noted that he worried about the negative health impacts of some of his habits—such as the toll alcohol would have on his heart—but that he did his best to avoid anything he thought presented a risk to his health.

Importantly, for all of the participants, objective health concerns trumped concerns about winning when considering any type of performance enhancement. Danielle, 41, summed up this view saying:

> I run but I do other things. It's not that important to me if I win a race….We do it [run] to be fit and healthy and I don't think it's [PED use] a healthy thing to do to your body.

Running is viewed as part of the process of health, while PED use is seen to potentially jeopardize those efforts. The value here is placed on health and the continual avoidance of any risk to that goal.

Doping

One of the misunderstandings about doping was that all banned substances had to necessarily impact performance in a substantial way. Walt, 40, considered doping "Anything that artificially enhances your performance." The use of masking agents—those products or substances used to hide or mask the presence of PEDs in the body—or non-enhancing banned substances were generally not mentioned by most participants. The one exception was regarding marijuana, as Sam noted "Someone who smokes pot, are they a doper? I guess yes." This was even true of Sarah, a 39-year-old experienced runner and running coach, who described how she understood doping: "I guess my first reaction is taking any kind of substance that enhances performance." When pressed, Sarah noted that not all enhancing substances were necessarily doping, including the coffee she drank while we spoke, and that doping was specifically banned substances or "like blood doping."

Sarah's assumption is in line with the understanding that banned substances will make performances better or training easier. Like all but three of the other participants, she understood doping to require intent to cheat by the athlete. As Brian, 43, said "Yeah, it has to be systematic and intentional otherwise it's in that grey area." This "grey area" is when an athlete may unintentionally use a banned substance, which Brian noted he does not consider doping.

The participants did believe that within their own daily practices of health they were acting properly and conforming to anti-doping regulations, as they understand them. German, 41, described his own routine:

> I take Vitamin D but that doesn't help me with training. I take an allergy pill because I have allergies. Outside of that, I try to eat fruits and vegetables and get

> nutrients and be overall healthy…The only supplements I take are what's on race day and those aren't supplements really. It's just the nutrition you need in powder form.

German sees his supplement use as part of improving and maintaining his health, not for enhancing his performance. Even his use of allergy pills did not cause him concern, despite several such products containing ingredients that are indeed banned by WADA (WADA, 2015b). However, many revealed that they do not fully understand either the entirety of the list of substances banned in competition or the logic that underpins these regulations. Brian rhetorically asked, "I mean, who even knows what's on the list?" This lack of clarity is likely due to the fact that none of the respondents had ever been exposed to formal anti-doping education.

Calvin also admitted to not having ever read the list of banned substances, but drew on his medical background to elaborate on what he saw as the defining characteristics of unacceptable PEDs:

> I would say it is basically taking some type of substance that would give you an unfair advantage over other people. An advantage that is more than just training hard. Some type of hormone or pill that could make your response to training greater than just regular physiologic response.

He was clear that substances or methods could be performance enhancing without necessarily being considered doping. He was also clear that PEDs would allow an athlete to increase training volume and intensity while recovering at the same rate or faster than what could be achieved without such a substance, such as anabolic steroids. Though I noted during the interview that not all banned substances had such an effect, Calvin saw the distinction between allowable supplements and unallowable PEDs as being based on the physiological reaction to a substance. Effectiveness was the basis for doping in this view.

Even as a marathon runner who has won or placed in several races (though never given an anti-doping test), 37-year-old Carlo, also reported being unclear on what he thought constituted doping versus other forms of enhancement, except for the use of injections:

> I think it's more injecting yourself with – or I'm not sure to say injecting, but taking some sort of foreign substance or taking, you know, like blood doping, adding something; more blood to your system to increase your ability to, like, exchange oxygen or even like, when running you know, the recovery. So you know, hGH – and I don't know if runners really take hGH or marathoners, but I'm sure like blood doping and EPO to increase your blood volume and things like that, yeah.

Similarly, 40-year-old Stan thought doping included:

> Shooting some chemicals in your blood, or giving your blood more oxygen. I think they're taking blood out and then

> shooting chemicals into in to give it more oxygen…Taking hGH for example. Doing testosterone injections, I consider doping. Or an artificial product that would be an enhancement and are not natural.

For Carlo and Stan, doping specifically meant blood doping or injecting PEDs that would alter one's blood profile and result in a significantly improved performance. Injecting a substance, especially one considered "artificial," into the body was viewed as one of the clear indications that something might not be acceptable. The risks of using injected substances outside a medical setting presented a clear line between what is doping and what could be allowable.

Early in his interview, Carlo noted that he did not think banned PEDs were necessarily bad and could potentially be useful for runners. He reiterated his view by offering that blood doping or EPO could actually aid recovery for runners: "If anything they [doping athletes] are probably, you know, if you are able to recover faster you're probably actually helping your body." This comment underscores the fine line between what is understood as healthy and what is considered harmful. The participants sought to remain in compliance with the rules of the sport, as far as they understood them, and with the demands of health culture. One way the participants engaged with their health was through the use of supplements.

Supplements

With the exception of one, all of the participants responded that they regularly use some form of supplementation, most commonly in the form of vitamin supplements, isolated proteins, or electrolyte replacement products such as GU or Gatorade type products. Gillian, 39, reported taking "probiotics and a multi-vitamin" daily. Roger, 37, reported using "fish oil everyday, vitamin D everyday, multi-vitamin, whey protein everyday." Similarly, most responded that they use or have used some form of OTC pain or cold/flu medication, many routinely, such as 28-year-old Mike: "I have a longstanding relationship with Advil…at times I've relied on them with 12 a day." These products were used for routine health maintenance, such as preventing dehydration in training, promoting overall health and improved immunity, or for managing physical discomfort related to training.

Several respondents also indicated that they actively sought out supplements to aid in their training and recovery, such as Carrie, 31, who reported using a recovery supplement: "I mean I take Endurox to recover, but that's still legal." In each case the respondent drew a distinction between banned substances and whatever form of supplementation or medication they used, casting the former as unacceptable and anti-health and the latter as acceptable and pro-health. Overall, the good-healthy/bad-unhealthy dichotomy appeared to dominate

much of the participants' thinking about doping.

Wyatt, 54, was one of the more outspoken, strict anti-doping respondents. He was, however, in favor of using supplements. He explained his regimen, set out by a local doctor:

> I did a detox program with juicing, endurance, weights, very rigorous diet, lots of supplements, stress relief, meditation…I took a lot of supplements, but none would've put me on the WADA list…I've taken some things that are claimed to be performance enhancing, but independently from athletics. I think they have health benefits, but not for the performance enhancement.

Gaining potential pro-health benefits was Wyatt's motivation for undertaking his supplementation regimen. He was clear in pointing out he was not seeking a performance benefit from this medically-based detoxification program, which also included blood testing and analysis, though did acknowledge that such a benefit may indeed exist. He distinguished between the allowable health enhancing effects of a program centered on supplements and what he considers an unacceptable performance enhancing benefit from banned PEDs. For Wyatt, and the several other respondents who drew a similar distinction, any unsolicited performance enhancement from a supplement would be a "happy coincidence" even if unintentional. Since dietary supplements are widely used and accepted by both runners and non-runners, any benefit derived from their use is allowable, fortunate, and even desirable.

Indeed, runners like Wyatt see supplements as an investment in their health. Most interviewees, such as 28-year-old Henry, were quick to acknowledge that they indeed seek performance enhancement when taking supplements:

> When I first started running I tried everything off the shelves to see if they had any effect in performance enhancement or muscle or how much mileage I could handle, anything I read about I would just try it.

Henry based his decisions on what to try based on their availability in retail stores or information found through running websites and forums. He was willing to try anything to benefit performance, assuming minimal risk to his health of such trials. Similarly, Carrie based her regard for the safety of a product on its context. Carrie reflects that she doesn't worry about what she is taking because "I know that what I'm doing is legal and from GNC and in *Runner's World* magazine." As with Henry, Carrie assumes the products she sees advertised in *Runner's World* magazine or sold at the supplement retail chain GNC do not present any objective risk to her health, but instead her consumption of such products may benefit her performance and health in some way. Both Henry and Carrie perceive a low risk of such products based on their relationship to or appearance with trusted media, brands, or individuals.

The willingness to try a variety of substances found within a running context did not automatically remove all perceived risk. Brian described his history of supplementation experiments in search of performance benefits:

> I was sponsored by [supplement company] and I take their stuff…At expos you try things…hornet vomit…Over the years it's [personal usage] toned down to multi, vitamin C, and fish oil, and I don't take that consistently…I mean, supplements are basically thrown together, but it's hardly whole food…Who knows what it is?

Brian raises the question about the contents and safety of many supplements. Athletes are often admonished to buy supplements only from "reputable" companies, but determining and tracking down which manufacturers are reputable can be difficult. While he does continue to use supplements, Brian acknowledged the lack of transparency regarding the contents of many supplements.

Like Henry and Carrie, Brian's use of supplements is normalized by the amount of products he is surrounded with at sports expos he attends, in stores he shops in, and supplied by his sponsors. Normalization of these substances within the running community lessens the perception of risk. Dietary supplements are not only viewed as less risky than banned PEDs, they are also viewed positively as a healthy practice. Because he is inundated with such products promising to boost his health and his performances, Brian views these products as acceptable training aids. As a result, he takes the safety of these products for granted despite his own critique of the lack of information and regulation of such supplements.

Though most of the participants were willing and sometimes eager to use supplements, they were not willing to take what they perceived as higher cost risks with their health. Henry was willing to use any supplements he could find for performance enhancement, but was unwilling to knowingly use a banned substance. When asked why he would not engage in doping he responded:

> Potential for bodily harm. I mean if you're risk adverse, fearful of the general stigma against it. You do the cost-benefit analysis and decide the satisfaction or potential monetary compensation isn't valuable enough to offset the health cost or the stigma of being a cheat then you wouldn't do that. I think most people are pretty risk-averse. There isn't a lot of great evidence that says it's [doping] good for our long-term health, I mean why put your self at that great of risk?

Henry avoids risk-taking behaviors in the absence of evidence that such risk could potentially benefit health. Notably, an absence of evidence indicating such a risk is anti-health does not have the opposite effect that would lead him to try banned substances. The official ban, therefore, seems to imply some type of health risk and

runners, like Henry, who avoid this type of risk would then avoid banned substances. Henry, unlike Brian who expressed concern at the questionable contents of supplements and other non-banned substances, perceives a negligible health risk in taking non-banned supplements and, as noted above, is not averse to their consumption and use by him or other runners.

Discussion

This research delineates the ways competitive, non-elite runners engage in processes of healthicization and how their participation in competitive sport works to shape their behaviors and beliefs. The non-elite runners in this study engaged in specific practices they viewed as furthering the goal of becoming or remaining healthy and moral individuals, including avoiding risky PEDs and using "safe" supplements to enhance both health and performance. They viewed doping and supplement use as distinct practices with specific motivations, the former to win competitions and the latter to bolster health. Despite the documented problems of dietary supplements and their regulation for safety or effectiveness, the participants continued to view them as safe and healthy. This appears inconsistent with healthist demands to avoid risks to one's health, but demonstrates that runners understand health and risk within the context of their sport and their identities as moral citizens. Running and potential racing success are ways to show how fit one is—both in terms of health and citizenship. The desire to protect that identity offers a partial explanation for why runners seek to avoid knowingly consuming banned substances, but will use questionable supplements in their routines: supplements are a "safe" way to enhance and/or mitigate the negative effects of intense training, meaning their use functions as a daily practice of health.

Most participants thought doping was limited to the substances and methods most commonly detected and reported upon when elite athletes have tested positive for PEDs: anabolic steroids, Erythropoietin (EPO), blood doping involving banking ones own blood, and human growth hormone (hGH). Any substance requiring injection done outside a medical setting presented a line between more and less risky PEDs, similar to recent findings among amateur cyclists (Outram & Stewart, 2015). The notion that an injected substance was likely banned or harmful if done outside of a medical setting is likely related to fears and associations of both the anabolic steroid injecting athlete (Monaghan, 2001; Beamish, 2011) and with those of injection drug users of illicit narcotics such as heroin (Ahern, Stuber, & Galea, 2007). While they did go out of their way to avoid such substances in order to protect health, they were unaware of other doping agents, as well as the potential risks presented by substances that had not received media coverage. This suggests that these runners were unaware of the nuances of anti-doping regulations, but also that they may overlook banned and

potentially dangerous substances taken unintentionally. In this way, the current participants were behaving in ways counter to the imperative of health culture to always be aware of your personal health risks despite their active pursuit of health. Further, many felt that as long as they were not actively seeking to enhance their performance through substances, they were not in violation of the rules or risking health. However, doping and the associated health risks do not require intent (Pluim, 2008) as when athletes are sanctioned for accidental ingestion of a banned substance (Henning & Dimeo, 2015).

Though most participants agreed that using substances banned in racing present a high level of risk to individual health, they generally had only partial knowledge of doping and banned substances. This finding was consistent with previous surveys of elite athletes, including some who are regularly given doping tests (Johnson, Butryn, & Masucci, 2013; Mottram et al., 2008). In the current case, this may be partially explained by the lack of formal anti-doping education, and the participants' reliance on media and other runners for information. This type of self-education was consistent with recent research findings on protective factors against doping (Erickson, McKenna, & Backhouse, 2015).

Though non-elite runners are generally not subject to anti-doping tests, rarely win any significant prizes, and are rarely the focus of media coverage, that does not preclude them from seeking out ways to improve their running performances. Most participants purchased and used dietary supplements and OTC medications to improvement health and/or enhance performance. For most participants, supplements presented a loophole for potentially gaining a performance enhancement while remaining within the letter of sports law, as they understand it. This acceptability allows non-elite runners to maintain their identity as good/healthy runners because they have avoided substances banned from sports, as they can continue to claim they are avoiding risks to their health as well as performing good sportsmanship.

The widespread use of dietary supplements among the participants points to a complex issue for runners' health. With the exception of only three participants, the runners in this study saw dietary supplements as a low risk way to promote health and potentially aid performance within what they understood as the rules of the sport. This sense of security is understandable given the important role the FDA has in regulating food and medicine. Instead, a product's availability appears to overshadow printed warnings that the FDA has not approved a supplement. Relying on coaches, other runners, or Internet sources for information is not useful when none of the parties has been educated on anti-doping policy or the health implications of many available supplements and OTC products. Thus, the vast array of sources and products available to runners can be

difficult to negotiate. This task becomes even more difficult when considered against the backdrop of a health culture that requires them to take full responsibility for their health.

Limitations

This study is limited in that the sample includes more male participants than female. The current sample includes only 32% women, contrary to the broader road racing demographics where women outnumber men 57% to 43%, respectively (Running USA, 2015). As previously noted, this difference may result from gendered notions of competitiveness where women are viewed as generally less competitive in comparison to their male counterparts. It is possible that participants viewed male runners as more "competitive" than female runners, and that this view was reflected in who they chose to refer for participation. A second limitation is that this study only focused on competitive and team-affiliated non-elite runners' views and experiences of doping and dietary supplements. While neither limitation should diminish the importance of their views as a group, they may limit the generalizability of this group to the less competitive non-elite runners that make up the majority of road races. Future research into less competitive amateur runners is important to better understand the intersections of regulation, substances, and health for a greater section of the growing running population. Any future studies should also employ sampling methods that ensure women are represented in proportion to their general participation rates in road races. Further, future research into runners' usage and perceptions of PEDs and supplements should examine if differences between runners emerge along such lines as gender, age, racing frequency, training volume, age group (or overall) placing and ranking. This research would likely require a larger sample than the one used in the current project.

Conclusion

The non-elite runners in this study share a healthicized ethos. They view their participation, supplementation, and training-related habits as an endeavor towards health. Health culture demands that individuals have relevant medical knowledge and an understanding of their individual risk profile. Indeed, the participants take the information they receive via the media or others in the running community and attempt to apply it to their own process of health. However, these interpretations of what is or is not either doping or healthy, as well as bad or good, are often shaped by one's identity as a healthy runner.

Despite the demonstrated risk of using supplements, such products are presented to runners and others in the opposite way: that individuals risk their health by *not* using them. As such, there is no need to question the risks of their use for either health or performance, as would be the case with banned PEDs. Purchasing and using supplements is then part of the daily

practice of health, through which runners demonstrate their fit as healthy citizens. The supplement-using runner, then, is responsible, constantly aware of and managing her health through training and correct supplementation in accordance with the goals of health culture. Consumption of these products, then, is a central part of the process of health. The irony is that it is these same products that may also undermine a runner's health.

Whether or not they are effective for performance enhancement, the safety and contents of dietary supplements is questionable (Pipe & Ayotte, 2002). These products, while legal, may be cross-contaminated with banned substances or other potentially harmful ingredients not included on the product labels. Labels do not necessarily report all potential ingredients that may make their way into supplements—either accidently through sharing close manufacturing quarters with other products, or intentionally by manufacturers who add banned performance enhancers to the products to produce the effects sought by the consumer— that put athletes at risk for unanticipated negative side effects, such as allergic reactions (Cohen, 2009). The participants were not wholly unaware of the risks presented by supplements. However, their use was so widely accepted that their use became a normal part of training for most. In this environment, especially when runners rely on a range of sources for information, a runner could conflate availability or effectiveness with safety and healthfulness.

Increasing athlete awareness of the potential risk of using unverified supplements could help runners make better decisions when considering using a substance for either health or performance enhancement. Anti-doping agencies and the governing bodies for running and athletics could address both the knowledge gaps and health risks by expanding educational programming regarding banned and non-banned substances to include non-elite runners. Educational programs adapted from the model proposed by Backhouse, McKenna, and Patterson (2009) that includes tailoring the presentation to the specific audience, skill development, and reinforced through follow-up presentations could effectively target non-elite runners and reflect their experiences with training and racing. Such programs should also be sensitive the requirements of health culture faced by these adult athletes.

Given the widespread use of supplements generally and how the risks of some well-known doping agents have been sensationalized (López, 2013; 2014), it is perhaps unsurprising that many would not question the safety of a product they may have been encouraged to use by the media, other runners, or a coach. However, in assuming supplements are safe, allowable, and healthy, many runners may be taking inadvertent risks with their health. It is likely that Claire Squires felt relatively safe in using the supplement Jack3D for a boost

during the later miles of the London Marathon (Hamilton, 2013). Her resulting death is a stark reminder that availability ensures neither safety nor healthfulness when considering supplements.

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The Modernization of Policy-Making Processes in National Sport Organizations: A Case Study of Athletics Canada

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This article explores the consequences of modernization on the policy-making processes of a singular National Sport Organization: Athletics Canada. In drawing upon the works of Green and Houlihan (2005) as a baseline comparison, we examine how the organizations' policy-making processes have changed over a 10-year period (2002-2012). Specifically, our analysis focuses on the nature and extent of these intra-organizational policy-related changes and how they have influenced the organization's decision-making capabilities. The descriptive analysis is informed by empirical data collected from eight in-depth semi-structured interviews with senior Athletics Canada personnel and concentrates on three inter-related themes (i) the development and prioritization of Own the Podium funded policies and programs; and (ii) the development and prioritization of evidence-based policies and programs, which, in turn, has resulted in (iii) increased inter-organizational relationship strain between Athletics Canada and its key delivery partners. More broadly, our investigation contributes to recent amateur sport scholarship that has sought to better understand how these broader socio-political shifts have influenced the specific decision-making processes of sport organizations.

The examination of organizational change and reform has been a central thread to discussions surrounding amateur sport. Scholars have drawn upon a raft of theoretical perspectives and concepts in order to understand and explain the nature and extent of change evident within amateur sport organizations. These include, but are not limited to, commercialization (e.g.,

Slack, 2004), professionalization (e.g., Thibault, Slack, & Hinings, 1991; Macintosh, Bedecki, & Franks, 1987; Macintosh & Whitson, 1990), and organizational and institutional theory (e.g., O'Brien & Slack, 2003, 2004; Kikulis, Slack, & Hinings, 1992; Washington & Patterson, 2011). Sport policy scholars have also drawn upon a number of meso-level theoretical concepts to explain organizational and systemic change. These include policy communities and advocacy coalitions (Green, 2004; Green & Houlihan, 2005), lesson drawing and policy transfer (Green, 2007), and path-dependency (Green & Collins, 2008). More recent discussions surrounding organization and systemic change have centred on more specific issues of corporate or organizational governance (e.g., Hoye & Cuskelly, 2007; Shilbury & Ferkins, 2011) and much broader concerns surrounding the modernization and the introduction of New Managerialism (NM) and New Public Management (NPM) into sport which are closely linked to what has collectively become known as the 'governance debate' (Rhodes, 1996; for its application to sport see Goodwin & Grix, 2011; Grix, 2010; Grix & Phillpots, 2011; Phillpots, Grix, & Quarmby, 2011).

Within the Canadian sport context, recent reform of the amateur sport landscape in general and National Sport Organizations (NSOs), the national level sport organizations responsible for governing over specific sports, in particular has been underpinned by two major, inter-related developments. The first of which has been Canada's successful bid to host the 2010 Olympic Winter Games in Vancouver. The Vancouver Winter Olympic Games were the third Olympic Games to be hosted in Canada (previously Canada hosted the Montreal 1976 Summer Olympic Games and the Calgary 1988 Winter Olympic Games) with Canada having failed twice to win a single gold medal on home soil – the only host country in Olympic history to do so. In response to Canada's successful bid and to ensure that Canada would achieve its target of first place on the podium at the 2010 Olympic Winter Games and place top three at the 2010 Paralympic Winter Games (Priestner Allinger & Allinger, 2004), high performance stakeholders established a C$117 million technical program initiative entitled 'Own the Podium 2010' (OTP) (Priestner Allinger & Allinger, 2004). The following high performance stakeholders met in Calgary: Sport Canada, National/Multi-Sport Organisations, the Canadian Olympic Committee (COC), the Canadian Paralympic Committee (CPC), the Canadian Sport Centres/Institute Network, and WinSport Canada (previously the Canadian Olympic Delivery Authority)

The initiative began in 2004, and was specifically designed to ensure that Canada had its most successful Olympic Games ever by "provid[ing] expertise and leadership to NSOs whose athletes are capable of winning medals at the 2010 Winter Games" (OTP, n.d.b., p. 1). This unprecedented collaborative venture

resulted in the creation of Canada's first ever agency for high performance sport.

These developments (i.e. Vancouver 2010 Winter Olympic and Paralympic Games and the creation of OTP) have also been paralleled, and largely supported by, a substantial increase in federal government investment in high performance sport in recent years (De Bosscher, Bingham, Shibli, Van Bottenburg, & De Knop, 2006; Green & Houlihan, 2005; Grix & Carmichael, 2012; Thibault & Harvey, 2013). Over the previous two summer Olympic quadrennials, for example, Canada has witnessed a doubling of federal government investment into Olympic summer sports programs from C$52,297,871 during the Beijing quadrennial to C$117,512,216 in the lead up to the London 2012 Games (OTP, n.d.a). This increased levels of investment have, however, resulted in increasing involvement of federal government in sport to ensure that taxpayer funding is well spent (Green & Houlihan, 2005; Thibault & Harvey, 2013). The implications of this increasing involvement of government in sport generally and Canadian sport specifically has been well documented (Green & Houlihan, 2005; Grix & Carmichael, 2012; Macintosh, Bedecki, & Franks, 1990; Macintosh & Whitson, 1990; Thibault & Harvey, 2013).

In light of the ongoing amateur sport-related discussions surrounding organizational change and reform and the abovementioned major developments within Canadian sport, more research is required to understand how these recent developments – particularly federal government-related developments – have influenced amateur sport organizations in Canada. As Thibault and Harvey (2013) note, "contemporary analysis of government involvement in 'amateur' sport is not only warranted, it is essential given the significant changes that have occurred in Canadian sport" (Thibault & Harvey, 2013, p. 11). Hence, although previous scholarship has provided valuable contributions to our understanding of the nature and extent of these broader socio-political shifts (e.g., modernization and governance), little is still known about the specific consequences of these broader shifts for sport organizations further down the delivery system (for exceptions within the UK context see Adams, 2011; Grix, 2009). Questions that still remain unanswered within the Canadian sport context include, for example, how has Canada's successful bid and subsequent hosting influenced sport organizations in Canada? Similarly, what influence (if any) has the creation of OTP had on sport organizations? As such, the purpose of this investigation is to explore the influence of these recent developments on the policy-making processes of one NSO: Athletics Canada. To this end, we draw upon the discussions surrounding the modernization of sport and the insights generated from a singular case study of Athletics Canada to examine how the organizations' policy-

making processes have changed over a 10-year period (2002-2012).

Modernization and sport

Many scholars have examined the impact of modernization within sport (cf. Adams, 2011; Green & Houlihan, 2005, 2006; Grix, 2009; Grix & Parker, 2011; Houlihan & Green, 2009; Sam, 2009, 2011) even despite the concept's lack of precision. This is not to suggest that the concept of modernization is meaningless. For Finlayson (2003), "modernisation appears to refer to a large scale sense of change, development and transformation, something different to what has come before" (p. 16). From this perspective, Finlayson (2003, p. 63) described modernization as an 'up' word that implies improvement, progression and change for the better. Houlihan and Green (2009, p. 679) offer the closest articulation to a precise definition by referring to modernization as a particular set themes (e.g., responsiveness, managerialism, responsibilization), principles (e.g., partnership working), technologies (e.g., performance measurements such as benchmarking, public service agreements and auditing), and a narrative that has been used to frame and problematize the current 'state' of public sector management. In this sense, modernization is a persistent aim of government agencies (Sam, 2009) that has come to be viewed as one of the many ways in which governments can shape (i.e. influence) and steer public sector organizations more generally and sport organizations specifically in order to achieve its own objectives.

Houlihan and Green (2009) investigated the causes and consequences of modernization on two Non-Departmental Public Bodies (UK Sport and Sport England) within the United Kingdom. The authors found that modernization was primarily driven by central government, with some evidence of a perceived need for change within the two organizations. The consequences of modernization (i.e. reform) for these governmental agencies were greater decision-making constraints on professional staff, the marginalization of certain sporting interests, and the increasing adoption of business-like principles (e.g., evidence-based decision making and accountability measures). The latter (i.e. the adoption of business-like principles), in particular, had also resulted in a narrowing of organizational objectives – to a point that both organizations were increasingly adopting oversimplified strategic objectives.

Of particular relevance to the present study are the works of Grix and colleagues (Grix, 2009; Grix & Parker, 2011). Grix (2009) examined the impact of modernization on UK Athletics, the NSO responsible for overseeing track and field athletics in the UK. The author argued that poor international level (i.e. world championships and Olympic/Paralympic Games) performances in the sport could, in part, be attributed to the way in which the NSO was governed. In drawing upon the

governance debate more broadly and the debates surrounding 'New Managerialism' specifically, Grix (2009) concludes that the values and practices imposed by central government – through its conditional funding agreements – effectively 'strait-jacketed' the organization (UK Athletics) in its decision-making capabilities. More specifically, Grix's (2009) analysis revealed, *inter alia*, that UK Athletics was characterized by key executive-level personnel turnover and an increasing focus on accountability up towards governmental agencies. According to Grix (2009), UK Athletics has also established a number of auditing technologies; most notably legally binding key performance indicators between UK Athletics and UK Sport. In a follow-up investigation, Grix and Parker (2011) built upon the findings of Grix's UK Athletic case study to provide three explanations for the relative decline of Athletics within the UK. These explanations included: the poor governance of UK Athletics, broader social/societal change, and changes within school sport provision.

In drawing upon the abovementioned policy-related scholarship (namely Green, Grix, and Houlihan), our investigation offers the following threefold contribution to the amateur sport literature. First, our investigation further explores the consequences of modernization within the Canadian sport context. As such, our study contributes an in-depth empirical case study to the small but growing body of literature that has examined the reforms of amateur sport organizations in recent years – specifically as they relate to the ongoing modernization process (e.g., Grix, 2009; Houlihan & Green, 2009). Second, and in building on previous scholarship, this investigation provides a more detailed understanding of how these broader socio-political shifts (such as modernization) are influencing the specific decision-making processes of NSOs. Previous scholarship has adopted a broader analytical focus by attempting to examine and understand the nature of these socio-political influences on, for example, governmental agencies (e.g., Houlihan & Green, 2009; Sam, 2011) or to explain the overall decline of a particular sport (Grix & Parker, 2011) rather than focusing specifically on the consequences of such reforms on the managerial and decision-making practices of sport organizations further down the delivery chain (i.e. NSOs, clubs etc.). Third, and finally, this article provides an empirical case study analysis into the policy-making processes of one of Canada's most prominent NSOs – Athletics Canada. Consequently we contribute an empirical insight for those interested in more specific discussions surrounding the national and international development of track and field athletics (henceforth athletics) (e.g., Grix, 2009; Grix & Parker, 2011; Truyens, DeBosscher, Heyndels, & Westerbeek, 2014).

Rationale and Research Context

The empirical data presented herein draws from the Canadian portion of a much larger, international study examining sport policy factors leading to international sporting success (or 'SPLISS') in the sport of Athletics (Truyens et al., 2014). This broader study (Truyens et al., 2014) was a sport-specific follow up investigation to examine the competitiveness of countries in the sport of athletics. More specifically, this follow-up study adapted the SPLISS framework developed by De Bosscher and colleagues (De Bosscher et al., 2006) in order to benchmark (i.e. compare) the development of countries across nine policy areas (or pillars) (see Table 1 for an overview of these policy-areas). A mixed methods approach was employed that involved interviewing key personnel and surveying coaches, athletes and clubs within the sport. The first phase of this broader research project involved the completion of an inventory that examined the 'state of art' of Athletics within Canada. Completion of this inventory required in-depth interviews with key personnel within athletics, particularly Athletics Canada. For the purposes of the present contribution, the researchers adopted a viewpoint similar to that provided by Eisenhardt (1989), who noted that "if a new line of thinking emerges during the research, it makes sense to take advantage… [of it] to provide a new theoretical insight" (p. 539). During the initial research process, a new line of thinking surfaced and a number of reoccurring themes began to emerge from the empirical data in relation to the influence of modernization on the policy-making processes of Athletics Canada.

Athletics Canada is the national governing body for track and field athletics. Originally established in 1884, the not-for-profit organization is one of Canada's oldest NSO (Athletics Canada, n.d.b) and at the time of data collection generated approximately CAD$6 million in revenue per annum (e.g., CAD$6, 019,761 in 2010; Athletics Canada, 2010). Like many NSOs in Canada, Athletics Canada relies heavily upon government funding. Of particular note, Athletics Canada has seen a threefold increase in government funding over the past 10 years; compare for example Beijing (i.e., CAD$3,151,000) and London (i.e., CAD$10,234,500) quadrennials (OTP, n.d.b). Athletics Canada's headquarters is based in Ottawa and employs 15 full-time staff (at the time of data collection) with the mission to "provide leadership, development and competition that ensures world-level performance in athletics" (Athletics Canada, n.d.c). Although centrally coordinated by Athletics Canada, the delivery system of the sport in the country relies heavily upon its ten provincial and two territorial branches. These branches oversee their respective jurisdictions, a majority of grass roots programs, as well as the early development of athletes. This decentralized system of delivery typifies the federated delivery system of Canadian sport (Thibault & Harvey, 2013). With regard to

the delivery of elite programs, at the time of data collection Athletics Canada operated four, discipline-specific, national high performance training centers across the country. The centers are located in Victoria (middle distance running), Kamloops (throws), Ottawa/Toronto (sprints and relays), and Calgary (selected technical events).

Methods

Case Study Approach

A holistic, single-case study design (Yin, 1994) was adopted to examine the policy-making processes of Athletics Canada. Rossman and Rallis (2003) defined case studies as "in-depth and detailed explorations of single examples (an event, process, organization, group, or individual) that are an instance drawn from a class of similar phenomena" (p. 104). Within case study research, emphasis is placed on developing thick description (Geertz, 1973) of highly complex and contemporary phenomena (typically within their real-life context; Yin, 1994). The utility of this approach lies in its ability to incorporate multiple data sources (Bryman, 2008; Yin, 1994) and is particularly useful in developing theoretical accounts (Eisenhardt, 1989; Einsenhardt & Graebner, 2007). Thus the (often misunderstood) intention of adopting a case study approach hereafter is to analytically generalize rather than statistically generalize (Flyvbjerg, 2006; Yin, 1994) in that this approach provides the opportunity to expand and generate theory rather than to simply enumerate frequencies.

Sampling and Procedure

As a part of the case study, semi-structured interviews were conducted with senior Athletics Canada personnel. Informants were selected primarily based on two criteria: current or former employment in the organization and specific (unparalleled) knowledge of Athletics Canada policy-making processes (Gratton & Jones, 2010). More specifically, informants were selected due to their knowledge in one (or more) of nine policy areas as identified in the SPLISS conceptual framework (for a detailed overview of these policy areas see De Bosscher et al., 2006). The individuals selected for interview were either part-time or full-time employees involved in the core business or technical operations of the organization. The eight interviewees were between 27 and 55 years of age and generally had 10 or more years of experience in the sport sector.

Interview guides were extracted from the SPLISS Athletics research consortium policy inventory (Truyens et al., 2014). Of the nine conducted interviews (one informant was interviewed twice, with each interview addressing unique policy-making processes), five were carried out face-to-face and took place at Athletics Canada's head office in Ottawa, Ontario and a high performance training camp in Phoenix, Arizona and four were conducted using the online communication program *Skype*. All

interviews were conducted by the first author between December 2010 and March 2011, ranged from 38 and 150 minutes in length, and were digitally recorded and transcribed verbatim. These transcripts produced 410 double-spaced pages of data for further analysis.

Understanding the Modernization of Athletics Canada's Policy-Making Processes

The work of Green and Houlihan (2005) was drawn upon as a baseline comparison to examine how Athletics Canada's policy-making processes had changed over time (i.e. between 2002-2012). In particular, Green and Houlihan's (2005) study provided a detailed examination of internal policy developments and major issues faced by Athletics Canada at the turn of the century (for further insight see Green & Houlihan, 2005, pp. 110-121). In addition, Green and Houlihan (2005) developed a conceptual framework that considered four areas of elite sport policy: facilities; full-time athletes; coaching, sport science, and sport medicine; and competition opportunities. Green and Houlihan then applied this framework to compare the development of several elite sport organizations and systems (see Green & Houlihan, 2005; Houlihan & Green, 2008). For purposes of our present analysis, the work of Green and Houlihan (2005) provided a means to examine the development of Athletics Canada policy-making processes and allowed for a comparison of the substance and salience of prior policies to those established after the inception of OTP. More practically, however, Green and Houlihan's (2005) work on Athletics Canada also provided a useful framework by which to reduce the large amount of data collected as a part of the original SPLISS Athletics study. See Table 1 for an overview of Green and Houlihan (2005) and the SPLISS model (De Bosscher et al., 2006).

Coding

The primary author undertook a process of independent open coding (Patton, 2002), specifically looking for any policy areas mentioned within Green and Houlihan's (2005) Athletics Canada case study. As a result of this process, a total of 24 specific policy areas were identified (see Table 2). These 24 policy areas were translated into codes and deductively applied to the analysis of transcripts. As to not limit analysis, the transcripts were also analyzed inductively, leaving open the opportunity for identifying new and emerging codes (i.e., policy areas). Allowing for the emergence of such codes was necessary given that some policy areas were either omitted by Green and Houlihan (2005) (e.g., those regarding the school system and talent identification) or not present at the time the initial study (e.g., those regarding the Long Term Athlete Development Model (LTAD) or National Training Centres). As a result of this process, a total of 41 policy areas/codes

were identified. It was from these policy areas/first order codes that second order codes were derived. The second order codes were then collapsed into three broad, inter-related themes: (i) The development and prioritization of OTP-funded policy-making processes (ii), the development and prioritization of evidence-based policies and programs, and (iii) the further straining of inter-organizational relationships.

Results

(i) Development and Prioritization of OTP-Funded Policies and Programs

Following the creation of OTP in 2004, Athletics Canada has developed and prioritized a number of OTP-funded policies and programs. In particular, the organization has utilized OTP funds over the past decade to develop and enhance athlete and coach development, as well as sport science and medicine programs. In an effort to enhance athlete development, for example, Athletics Canada established the Olympic Development Program (ODP) in 2011. The program was created in response to what many respondents described as a set of historically inadequate talent identification and development procedures. As part of the program, and at the time of data collection, Athletics Canada provided support to three tiers of athletes: Tier II athletes, those that achieved a minimum (internally set) performance standard, received both formal recognition and limited support (e.g., yearly planning and competition scheduling); Tier I athletes, those that achieved a comparatively greater performance standard, received increased support (e.g., partial funding, and access to training camps); and 2016 group athletes, those that ranked top eight in the world in a particular sport, received a full range of support (e.g., financing for both the athlete and the coach to attend training camps and competitions).

As Athletics Canada directed funding to high performance athletes, it simultaneously redirected funding from athletes elsewhere along the development pathway. Chiefly affected in this regard was Run Jump Throw, the organization's grassroots, participation-based program:

> When we started with Run Jump Throw five or six years ago, the funding model was similar, but not quite as targeted, and there was more money available from Sport Canada for development. At one time, Run Jump Throw had an operating budget of over $200,000, because there was a large licensing agreement that was struck with the Hershey Company, for over three or four years, and we were receiving over $100,000/year from Sport Canada. And in the last couple of years, Sport Canada dollars have been decreased significantly, to about half. Also, the deal with Hershey's was re-negotiated and there was less money there… And right now, if we were to say, 'Hey, let's start our grassroots development programs,' it'd be a lot more difficult than it was five years ago because the

> funding model has changed. (Respondent Four, 02/25/11)

Addressing the development-related issues that resulted from change to the aforementioned funding model was Respondent Eight:

> I hear about it every year, from angry coaches, athletes, and parents, who say, 'How is it that my son or daughter, as an athlete, has to pay to represent Canada?' I wish I had a better answer for them. We just don't have the resources to be able to do it, and we're in a system where those resources are attached to strings. 'We have a bunch of money that we want to give you, but it can only go into this pot. You can't take from us to help all those people.' And I understand targeting, and focus, but I just wish that there was more of an understanding of the long term development of an athlete…. I mean, there's a long road before they get to be top eight in the world, and we need to find a way to fund that. This is really important, what Own the Podium is doing, but we need to find a way to help them along that path before they get there. We have this short term need to win medals at the next [event], and we forget to have a longer perspective for 2016 and 2020 (02/04/11)

As the above quotation intimates, the consequences resulting from the adopted funding strategy extended to the organization's ability to support athletes in a manner consistent with the Sport Canada-mandated sport-specific LTAD plan. Athletics Canada, as such, became embroiled in a strategic dilemma in whether to enhance development opportunities for high performance athletes in accordance with the mandate of OTP on the one hand, or enhance development opportunities for all in accordance with the mandate more consistent with Sport Canada's LTAD on the other. Over the period of this study, the organization's focus lay in the former and not the latter.

The development and prioritization of OTP-funded policies and programs was also evident in Athletics Canada's development of high performance coaches. This development can be traced back to the creation of a coaching development position within Athletics Canada in 2006. Prior to the creation of this position, Athletics Canada had not assigned any individual the responsibility of overseeing the development and education of relevant coaches. The appointed manager, responding to both the potential for melioration and a set of sport-wide recommendations provided by the Canadian National Coaching Certification Council, subsequently restructured Athletics Canada's coaching development system. The restructured system, simply titled the New Athletics Canada National Coaching Certification Program (NCCP), differed from its predecessor in several regards, most apparently in relation to curriculum design and certification. The previous curriculum design comprised of five levels,

each with three components (theory, technical, and practical), whereas the new system consisted of three streams (representing model coaching environments; instruction, community, competition) focused on a single component – competency. Similarly, certification was once dispensed in accordance with the completion of a particular curriculum level. The new program reflects competency in a specific coaching stream and context (e.g., beginner instruction through to high performance). These and other such changes indicate a marked increase in the formalization of Athletics Canada's coaching development system.

The formalized system, despite accounting for an entire spectrum of coaches, facilitated a narrowing of the organization's orientation and domain. This was evidenced through the development and prioritization of a refined high performance coaching development program (reflective of one of six new certification contexts). The program, targeted in scope and available only to a select few participants, was developed in such a manner as to align with the agenda of OTP, and, as a consequence, better ensure the continued receipt of financial support. The distribution of such support by Athletics Canada, was not, however, inclusive; instead, it reinforced the increasingly salient high performance agenda. In discussing the organization's provision of support to various streams and contexts/programs, Respondent Four stated:

> Athletics Canada oversees… all of the coach education programs in the country, from Run Jump Throw (the sole program for both the instruction and community streams), which is a grassroots program, right through to high performance. The actual delivery of the Run Jump Throw and grassroots programs is the responsibility of the [provincial] branches. We take over as the primary provider of competition development and higher, so developing high performance and elite coaching education…. At Level Three, the new competition development (the introductory program in the competition stream), we don't really support them other than by providing opportunities for education. It's really the branches that fund them. They pay for it so there's not necessarily a lot of support there for them… We're working on determining our policy of how competition development advanced coaches (the mediate program in the competition stream) will be supported… And then at Level Five, the OTP level (the high performance program in the competition stream), we develop an individual learning plan and apply for funding, and when we're successful, those opportunities are fully funded through Athletics Canada/OTP. (02/25/11)

The quotation indirectly highlights the disparate levels of support that Athletics Canada had provided to its various coaching development programs. The sole program for both the instruction and community streams, despite a sound infrastructure (e.g., set of policies), operated almost exclusively outside the purview of the organization. In contrast, the introductory and mediate programs in the competition stream lacked both policies and financing. The high performance program in the competition stream, finally, received both significant administrative and financial support. Athletics Canada, then, has, as it did with athlete support, prioritized high performance coaches at the expense of their sub-elite equivalents and grassroots participants.

The abovementioned issues, pertaining to domain (i.e., areas of service provision), were exacerbated by the organization's increased development and prioritization of sport science and medicine programs. The sport science program, for example, was enhanced through equipment (e.g., shoe, bodysuit) design interventions, the accumulation of "competitive intelligence" (i.e., information pertaining to other countries' developmental and competitive practices), and the engagement in, and incorporation of, biomechanical research. Responsible, in part, for the communications of conducted research were clinicians appointed to the organization's expanded sport medicine program. This program differed from its earlier counterparts in that it featured an integrated support team (consisting of various clinicians), employed preventative (rather than reactive) care and science, and introduced a new set of performance-related tests and analyses.

These measures, as well as those associated with the sport science program, were considered as integral not only to the organization's pursuit of sporting excellence, but also to retaining the financial and administrative support of OTP. Affirming the organization's increased prioritization of sport science and medicine programs, and speaking to the related developmental role of OTP, was Respondent One:

> We expect to see a sport science and sport medicine program as part of application, and it better be something that's real, something that you're using, something that's evolving, and something that has impact. Would we have done it without [the support of OTP]? Yeah. But would we have been as compelled, or as organized, or as well resourced? No. So this really helped. Own the Podium is very good. They [OTP] push us a bit, but they pull us along, and they accompany us at the same time. They're really, really good partners. (02/26/11)

The organization's sport science and medicine programs, as such, reinforced the pursuit of a high performance mandate. It is worth noting as well that although these programs resulted in positive consequences

for less elite athlete groups, these groups were seldom the intended beneficiaries. As Respondent One, in addressing a question of OTP funding criteria and finance disbursement, remarked:

> The criteria are, 'Will they impact podium performance at a major games?' That's the starting and ending point, quite frankly… Well, there always is an element of, 'How will this impact future performances? Does this have a broad enough application that it can be brought to the sport as a whole, and not just the elite level in this particular timeframe?' The work we're doing right now in the relay exchange area is something that will have a broad application to all of our relay teams; whether they're a youth or junior team, it would refine our relay protocols to a smaller or greater degree… Some of them would parlay into greater system change, better system thinking, but quite a bit of it would be individual athlete specific. (02/26/11)

The assumption being made by the respondent here, and the assumption of the organization's development and prioritization of high performance-related policy-making processes more generally, is that the development of elite athlete and coach programs (in line with the mandate of OTP) will, in turn, have knock-on or 'spill-over' effects on those further down the delivery system.

(ii) Development and Prioritization of Evidence-Based Policies and Programs

As Athletics Canada became further aligned with OTP's high performance objectives, it has also began to develop and prioritize a set of related, evidence-based policy-making processes. Developments in relation to Athletics Canada specifically involved the increased incorporation and employment of objective performance measures. The use of such measures was integral to the organization not only in projecting a form of accountability and responsiveness to the leading national sport agencies (e.g., Sport Canada, Canadian Olympic Committee, and Own the Podium), but also in determining the manners and streams in which the agencies' financing would be utilized. Addressing the interrelationship between the employment of objective measures (i.e., "evidence") and the organization's financing of particular high performance sport streams was Respondent Five:

> Every decision we're taking, when we're putting the blocks of our strategic plan in the high performance area, we need to have evidence…. And we had enough evidence in terms of long distance running and race walking to say that we just don't have the athletes…. Again, it all goes back to, 'We need to have evidence to decide what to do. We cannot just go on impression.' (02/04/11)

For Athletics Canada, then, decisions pertaining to high performance sport

became increasingly tied to measurable results.

Nowhere was this increasingly evidence-based approach to decision-making more apparent than in an organizational policy that pertained to the country's Athlete Assistance Program (AAP). Developed and managed by Sport Canada, the program supports select athletes through the provision of living, training allowances, and academic scholarships (Athletics Canada, n.d.a). Athletics Canada's role in this program is the identification and selection of eligible, sport-specific beneficiaries (colloquially referred to as 'card recipients') who can then be recommended to Sport Canada. It is in this regard that the organization has increased its incorporation and employment of objective performance measures. Describing in detail the manner in which the organization's AAP policy has been revised was Respondent Eight:

> … The way the criteria (for selecting beneficiaries) were done and written was not clear. It was not objective enough in the minds of the people who were out there… So at that time (2005), I gathered as much information as I could from people, and I created a point system which ranked athletes…. There were different categories, and a part of it was training, coaching environment, but then there was also how you did at nationals (national events), how you did at international events, what your top three performances averaged out to, and those types of things. And it worked in terms of being defendable, defensible, objective, and clear to people (02/04/11)

Although Athletics Canada's AAP policy was subsequently revised to what one respondent referred to as "something that's a little more subjective" (Respondent Eight, 02/04/11), it retained a far more stringent set of criteria than any of its pre-2002 equivalents. The evidence-based policy thus reinforced the newly adopted organizational value of objective and evidence-based decision-making.

The impact of the revised policy's formality was also particularly evident in the organization's talent identification and athlete development procedures. Prior to the policy's revision, these procedures were generally lacking in stringent guidelines and criteria for identifying and segmenting elite athletes. The same, however, could not be said for these procedures following the policy's revision. Retracing the development of these procedures and the related impact of the revised AAP policy (i.e., "criteria," "carding streams") was Respondent Two:

> What I believe is that we worked very hard in creating our high performance structure, and setting out all the strategies, and criteria, and very specific goals of top eight at podium, and that the development part was not matching it; it was just something out there, with no rhyme or reason, that needed to be organized more and aligned with everything that we were doing.... We

> had no direction before. And we had no criteria proof that we had talent... Sometimes we got suckered into being convinced that we had talent. Now, because everything is aligned with the carding streams, and everything is directed through top eight, we can actually confidently say, 'This is some serious talent. This talent is staying on stream. It's showing all the signs, and we know we can put some effort and money in to that.' (02/26/11)

In aligning talent identification and athlete development procedures with the revised AAP policy, Athletics Canada was ultimately able to set in place the framework for the previously described Olympic Development Program (ODP). It was also suggested, by at least one respondent, that this alignment could ease the process by which the organization narrowed its domain (from one that emphasized high performance sport in general to one that emphasized a select few high performance sport sub-disciplines, e.g., sprint, middle distance, and relay track events). The development of high performance-related, evidence-based policy-making processes thus included the formalization of a beneficiary plan, the creation of the ODP, and may yet still result in the narrowing of focus to support select high performance sport disciplines.

Athletics Canada's development and prioritization of evidence-based, high performance-related policy-making processes was apparent not only in the above examples, but also in the organization's decreased support of its Run Jump Throw program. The program was originally assembled some 20 years ago in an effort to enhance the physical fitness, health, and maturation of Canadian children six to twelve years of age. Despite its longevity and merits, the program as historically lacked a catalogue of objective performance measures (e.g., rates of continued participation, club memberships resulting from program participation). It was as a result of this decreased support that the program saw reductions in both funding and responsible personnel, with its implementation increasingly outsourced to provincial and territorial branches. Short of any intervention, the established future trajectory of the program is unlikely to experience any significant alteration. The fate of Run Jump Throw, as such, can therefore be viewed as emblematic of Athletics Canada's increased development and prioritization of high performance-related, evidence-based policy-making processes.

(iii) Strained Inter-organizational Relationships

As illustrated by the above example of continued outsourcing of the Run Jump Throw program, the narrowing of Athletics Canada strategic focus has also had consequences that extended beyond the operations of the organization. This was particularly evident through Athletic Canada's attempts to create a strategic plan that incorporated provincial and territorial

branches. Also affected by this plan were local clubs and Canadian interuniversity athletic programs. For Athletics Canada, the advancement of its high performance agenda necessitated the introduction of a strategic plan that incorporated both provincial and territorial branches. It can be argued that the particular grounds for such a plan stemmed from a disconnect in organizational domains: whereas the national organization increasingly valued those programs and activities that supported high performance sport, some provincial and territorial branches valued those programs and activities that encouraged general participation. The concern for Athletics Canada, then, was how to align all provincial and territorial branches with a high performance feeder system. According to one respondent, Athletics Canada initially attempted to achieve alignment through the use of individual, province-by-province/territory-by-territory memorandums of understanding. When these attempts failed, the organization sought to develop, with the assistance of individual branches, a singular, cohesive plan. One respondent's optimism relating to the prospects of implementing this plan were, however, rather limited:

> It's going to be challenging. It's going to be challenging because… (searching for the words). The reality is that the members (provincial/territorial branches) don't have the capacity to work on these kinds of things. It's always the same people doing the same kind of things, so sometimes they cannot [commit] time to that. And secondly, they are so - They're trying to survive, in some cases, and so for them to do these kind of things is not a priority, because they have other things to do rather than trying to align. And also, some have a tough time understanding what we're doing at the high performance level. (Respondent Five, 02/04/11)

Impediments relating to the implementation of the plan were therefore numerous; included among these were a disconnected set of organizational domains and orientations, as well as a limited amount of organizational capacity. The variance in organizational values ultimately undermined any potential for compromise, with a select few respondents suggesting that this had led to an increasingly strained relationship between the involved parties.

Local clubs, much like provincial and territorial branches, were also expected to be aligned with a high performance feeder system. In some respects, Athletics Canada achieved this end. Talent identification efforts at the level of local clubs were increased, and identified athletes were regularly moved into one of several national training centres. According to some respondents, the interventions on the part of Athletics Canada to move athletes to nationally recognized training centres, were not, however, always well received by local club managers or coaches. For some coaches, intervention primarily resulted in a

diminished sense of autonomy (local club managers and coaches no longer held the exclusive responsibility of identifying and developing elite junior athletes, but rather had to share this responsibility with Athletics Canada and national training centre personnel). This matter was further complicated as Athletics Canada had not endeavoured to garner the explicit cooperation of club personnel. The cumulative effect of these actions was, according to Respondent 2, the creation of a distrusting relationship, one that required the attention of Athletics Canada:

> Early on, at the age of 17, the biggest role for Athletics Canada is to create relationships with those clubs and coaches - to create a trusting communication relationship - and to [let them know] that, 'I am not here to steal your athlete. I'm recognizing that you've done something very positive, and let me help you to continue to ensure that that athlete stays on that high performance stream'…. The one thing that we're struggling with is getting those clubs to realize that they have maxed out on what they can offer an athlete, and when it is time to consider either creating a relationship with a national association, or a national event group, or moving an athlete to a [national training] centre, and that's a piece that Canada seems to not like. They don't really want to go there. And the only way I think that we can convince people is that we start showing some success, in the centres. And because the centre concept is so new it's going to take time. (02/26/11)

For this Athletics Canada employee, then, NSO intervention to move athletes to nationally recognized training centres in the operation of local clubs, despite any resultant benefits (e.g., improved athlete training opportunities, decreased club expenditures), led to strained interorganizational relationships.

The final group of organizations expected to be aligned with a high performance feeder system was to come from Canadian Interuniversity Sport. The alignment of interuniversity sport programs was particularly integral to Athletics Canada for two primary reasons: the provision of proximate and meaningful training opportunities, and the availability of support (e.g., educational and expert resources) for athlete retention efforts. Athletics Canada, however, experienced difficulties in their relationships with these programs. Addressing these difficulties, as well as the need for related amelioration, was, again, Respondent Two:

> The relationship, and I don't understand why, has been strained. And I think primarily just because the universities have one major focus, on the indoor season, and we have our focus, on the outdoor season. I don't understand. There's a whole bunch of history. But I see - for recruiting, retention, and talent development - that has to become a stronger relationship,

> because they are taking the athletes in the first half of my ODP program. So it's a weakness right now that I'm desperately trying to sort out. (02/26/11)

The response from Canadian interuniversity athletic programs, to Athletics Canada's intervention, was therefore similar to those that came from provincial/territorial branches and local clubs. In each example, the strategic plan presented a novel set of organizational values, challenged existent modes of operation, and threatened to reduce levels of autonomy. Given such conditions, it should not be surprising that the advancement of a high performance agenda resulted in several strained interorganizational relationships.

Discussion and Conclusion

This article examined the consequences of modernization on the policy-making processes of a singular NSO: Athletics Canada. In drawing upon the works of Green and Houlihan (2005) as a baseline comparison, this article provided a descriptive case study analysis of how the policy-making processes of an NSO have changed over a 10-year period (2002-2012). The above analysis brings to the forefront a number of key points of discussion that can be can be drawn out from the research findings. First and foremost, consistent with previous modernization-related works (Adams, 2011; Green & Houlihan, 2005, 2006; Grix, 2009; Grix & Parker, 2011; Houlihan & Green, 2009), it is evident that many of the developments that have occurred within Athletics Canada over the past decade have been governmental-driven, high performance focused, and increasingly evidence-based. Furthermore, the programs and policies that have seen the most development (i.e. have been prioritized) by Athletics Canada, have primarily been those that are heavily supported and facilitated by OTP. In particular, programs that have seen most support in recent years have been those surrounding high performance athlete support (e.g., sport science and medicine programs) and athlete and development (e.g., the ODP and AAP carding criteria).

It also apparent, from our data at least, that the nurturing and development of high performance related and OTP-driven programs and policies has often come at the expense or at least reduced support of other wider-social and participation based programs. This finding was emblematic in the above discussions surrounding the decreased support of the Run Jump Throw program since the mid-2000s. More broadly, then, our empirical case study of Athletics Canada lends support for Green and Houlihan's (2005) viewpoint that mass and elite objectives are fundamentally not compatible. As Green and Houlihan (2005) conclude in their seminal study of sport policy change, "it is hard to avoid the conclusion that elite sport development and achievement on the one hand and mass participation and club development on the other are deeply incompatible functions within the policy frameworks current in

Australia, Canada and the UK" (p. 189). Our case study supports Green and Houlihan's (2005) notion of incompatibility in that we revealed a number of specific examples of decision-making (e.g., the ODP, RJT, and AAP carding) whereby Athletics Canada has had to prioritize the pursuit of high performance sport at the expense of participation-based objectives. Furthermore, these incompatibilities were also evident within the requirements imposed by Canada's two lead governing agencies themselves. To provide an example, there is a clear dilemma for Athletics Canada to achieve the short-term, medal driven targets set by Own the Podium on the one hand, versus Sport Canada's requirement to adopt and implement the long-term, holistic LTAD model approach on the other.

Perhaps one of the more pertinent findings of our case study analysis of Athletics Canada, and closely linked to the above discussion regarding the development of select policies and programs, is further evidence to support the notion that the decision-making capabilities of the organization are heavily constrained by its governmental agency funding dependencies (namely Own the Podium and Sport Canada). These funding dependencies, in turn, effectively ensure that allocation of public funding comes with 'strings attached' to ensure that taxpayers funding is well spent (Green & Houlihan, 2005). As Grix (2009) notes in his analysis of UK Athletics (UKA), "the hierarchical chain of power from government down to NGBs [NSOs] has effectively strait-jacketed UKA into delivering a narrow, Olympic-driven sports policy to meet government set targets, which leaves little time and resources to address the factors behind the sports' general decline" (p. 46). Similarly, our analysis of Athletics Canada suggests that the organization is now operating under heavy constraint – most apparently by Own the Podium – to focus on and deliver short, term, Olympic-medal success. As such, many of the decisions by Athletics Canada professional staff since the turn of the century can be viewed as attempts to ensure compliance with its funding partners and ultimately to ensure the organizations' survival. In brief, Athletics Canada's decision-making capabilities are very much constrained within the 'rules of the game' currently dictated by federal government (via Own the Podium and Sport Canada) (Green & Houlihan, 2006).

What can also be drawn from the above review are the apparent similarities of the characteristics of reform evident within Athletics Canada compared to those experienced by UK Athletics (as reported by Grix, 2009). It is apparent from our analysis that both organizations have undergone strikingly similar reforms since the turn of the century. To provide examples of a few instances:

- Both organizations (UK Athletics and Athletics Canada) have been the subject of organizational

reform and key personnel turnover;
- Both organizations have undergone a narrowing of their strategic focus – specifically to Olympic-driven medal success;
- Due to funding and resource constraints, both organizations are increasingly adopting a more strategic approach in terms of athletes and sub-discipline investment;
- Both organizations exhibit a shift in accountability away from its members and clubs (i.e. grassroots stakeholders) and upwards towards governmental agencies (via Own the Podium and Sport Canada);
- Both organizations have increasingly adopted an evidence-based (i.e. 'New Managerial') approach to their policy/decision-making processes.

One notable difference between our analysis of Athletics Canada and Grix's (2009) analysis within the UK equivalent NSO, however, is that UKA and English Athletics specifically have been able to set key performance indicators between itself and its regional branches. As Grix (2009) notes, "English Athletics, for example sets some 130 KPIs to be met by its regional branches" (p. 40). In contrast, Athletics Canada has been unable to impose such targets on its member branches to date. This can in part, be explained by Canada's multi-level, federalist sport system (Thibault & Harvey, 2013) and the relative independence of the provincial/territorial branches compared to the UK.

The latter part of our review (i.e. discussions surrounding inter-organizational strain) bring to the forefront what Sam (2009) described as the 'wicked nature' of sport policy, particularly as they relate to the modernization of NSOs. Specifically, Athletics Canada's inability to formulate and agree-upon coherent development pathway plans with its provincial/territorial branches, the growing lack of trust between Athletics Canada and clubs, and the strained relationship between Athletics Canada and the CIS can all collectively be viewed as the 'unintended consequences' (i.e. product) of an NSO seeking to develop partnerships under the assumptions of a managerialist logic. For Sam (2009),

> "given the resounding justification for the modernizing agenda is for NSOs to be better attuned to the needs and demands of stakeholders, it remains to be seen whether more modern and commercialized practices will indeed raise their capacities to do so" (p. 510).

From the data collected, it seems apparent that the modernization of Athletics Canada is shifting the organizations' focus up to governmental agencies and away from the needs and demands of its stakeholders further down the delivery chain. The concern here, is the production of a 'democratic deficit' (Houlihan & Green, 2009) whereby decision-making in relation to the development of the sport is made

top-down rather than bottom-up and often at the expense or marginalization of certain stakeholders and groups.

In turning to the contributions of our case study analysis to the literature, this investigation explored further the consequences of modernization within the Canadian sport context. More specifically, our analysis built upon the works of Green and Houlihan (2005) to examine the consequences of modernization over a ten year period (2002-2012), and in doing so, contributes an in-depth empirical case study to the small but growing body of literature that has examined the reforms of amateur sport organizations in recent years (e.g., Adams, 2011; Grix, 2009; Houlihan & Green, 2009; Sam, 2009, 2011). In relation to limitations and directions for future research, it is acknowledged that this investigation did not originally set out to study the consequences of NSO reform. Future studies should therefore be constructed specifically to do so. Furthermore, the analysis was methodologically limited in that it only considered one organization. Future research could therefore expand the empirical site to include more NSOs (although valuable work has already been done here, cf Kikulis et al., 1992; Green & Houlihan, 2005), and to examine the influence of modernization on sports organizations further down the delivery system (i.e., provincial/ territorial branches and clubs). Finally, this research highlighted the continued and notable role that OTP is playing in terms of modernizing NSOs within the Canadian sporting context. It is evident from our case study of Athletics Canada that OTP is now a key driving force for the modernisation agenda evident within Canada and more needs to be done to understand how this nascent organization is influencing the Canadian sporting landscape.

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Tables

Table 1

Comparative Elite Sport Policy Model Factors

Green & Houlihan (2005)	*De Bosscher et al. (2006)*
1. Development of Elite Facilities	1. Financial Support 2. Policy Development 3. Participation
2. Emergence of 'Full-Time' Athletes	4. Talent ID and Development 5. Athletic & Post-Career Support
3. Developments in Coaching, Sport Science & Medicine	6. Training Facilities 7. Coaching Provision & Coach Development 8. (Inter)national Competition
4. Competition Opportunities for Elite Athletes	9. Scientific Research

Table 2

Extracted Athletics Canada Themes from Green & Houlihan (2005)

Development of Elite Level Facilities	*Emergence of 'full time' Athletes*	*Developments in Coaching, Sport Science & Medicine*	*Competition Opportunities for Elite Athletes*
a. No National Strategic Facility Plan	**e.** Athlete going to US + over reliance on AAP	**j.** Few 'Full-Time' Coaches Employed	**r.** Variance in Competition at all levels
b. Public Perception of Athletics	**f.** Non-Eligibility of AAP for NCAA Canadians	**k.** Concerns Over Coach Education Structure	**s.** Competition jurisdiction issues
c. Commercial Sponsorship Volatility	**g.** ACs Ambiguity Over 'Full-Time' Athletes	**l.** Key Hires as a Significant Change of Ethos	**t.** Low Levels of Domestic Competition
d. ACs ambiguous attitude towards CSCs	**h.** AC struggling with low federal funding	**m.** Volunteer Ethos Prevalence	**u.** Suitable Competition for Elite Athletes issue
	i. Restricted Athlete funding to AAP	**n.** Christie Report (2001) as a Catalyst	**v.** Competing Competition Schedules
		o. Sport Science Legitimization in 1988	**w.** Elite + Sub-Elite Competition divide
		p. Sport Science Problematic for AC	**x.** No Comprehensive Competition Structure
		q. Sport Science Internally Developed	**y.** AC emerging from a Policy Void

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Contributors and Constraints to Involvement with Youth Sports Officiating

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There is a growing concern about the shortage of sports officials and its impact on organized youth sport. The purpose of this study was to gain a better understanding of psychosocial factors that impact involvement with youth sports officiating by comparing and contrasting the experiences of officials from two distinct sports. In-depth interviews were conducted with baseball umpires and lacrosse officials. Resulting themes were classified as either contributors or constraints to involvement with officiating. The most striking difference between the two groups was the support provided in terms of mentorship, training, and administrative consideration. The baseball umpires received greater support and this was a key factor in overcoming constraints and fostering a sense of community. Implications and strategies for recruiting and retaining officials are discussed.

Referees, umpires, and other sports officials play an important role in organized sports by enforcing rules and keeping competitions as safe as possible. There is a growing concern as the number of qualified and committed sports officials continues to decline. The shortage of officials is a global phenomenon that affects many sports from the grassroots level to high caliber competition (Cuskelly & Hoye, 2004; Thornley, 2010). A shortage of officials can lead to a number of issues that can negatively impact athletes, coaches, fans, and sport administrators. These issues include having to cancel or reschedule games due to a lack of available officials (Topp, 2001), a decline in the quality of officiating as veteran officials are often overworked (Cuskelly & Hoye, 2004), and novice officials being forced into situations beyond their current knowledge and skill level (Read, 2000).

Much of the early literature on sports officials focused on stress, burnout, and

coping responses (Anshel & Weinberg, 1999; Dorsch & Paskevich, 2006; Goldsmith & Williams, 1992; Kellett & Shilbury, 2007; Rainey, 1995; Rainey & Hardy, 1999; Taylor, Daniel, Leith, & Burke, 1990; Wolfson & Neave, 2007). Overall, the results from these studies suggest that most officials are able to employ effective coping strategies to deal with the stress. More recent research has examined sociological and organizational factors associated with both retention and attrition of officials (Forbes & Livingston, 2013; Kellett & Warner, 2011; Phillips & Fairley, 2014; Tingle, Warner, & Sartore-Baldwin, 2014; Warner, Tingle, & Kellett, 2013). Findings from these studies revealed that there are multiple social and administrative factors associated with the retention and attrition of sports officials. Suggestions for future research resulting from these investigations included comparing and contrasting officials from other sports (Tingle et al., 2014; Warner et al., 2013) and examining differences between motives and constraints of officials from various sport contexts (Phillips & Fairly, 2014).

Building on recent research, this study examined the experiences of officials from two different sports to gain a better understanding of contributing and constraining factors that impact involvement with youth sports officiating. Youth sports were the focus of this study due to the large number of participants in organized youth sports and the subsequent need for officials (Kelly & Carchia, 2013). Officials from boys' baseball and girls' lacrosse were targeted due to the distinct natures of these two sports. Baseball is a well-established sport that does not require much physical movement for umpires, most of whom are men. Girls' lacrosse is an emerging sport that involves a great deal of physical exertion for officials and many of the officials are women. In-depth interviews were conducted with baseball umpires and lacrosse officials to gain insight on both contributors and constraints to their involvement with officiating. The following research questions guided this study:

RQ1: What are the salient factors that contribute to involvement with youth sports officiating?

RQ2: What are the salient factors that constrain involvement with youth sports officiating?

RQ3: What, if any, differences exist between baseball umpires and lacrosse officials in terms of their involvement with youth sports officiating?

Review of Literature

Research on Referees

Some of the first studies on sports officials examined patterns of initial entry into officiating and reasons for continuing (Furst, 1989, 1991; Purdy & Snyder, 1985). The studies by Furst (1989, 1991) included samples of volleyball, basketball, and softball officials working at the collegiate level whereas Purdy and Snyder's (1985) study focused on high school basketball

officials. Findings from all three of these studies indicated individuals became involved with officiating primarily through friends and relatives or through personal interest in a sport. The reasons to continue officiating included love of the game, challenge and excitement of the job, and friendships with other officials.

Other early studies focused on the impact of stress and burnout on intentions to discontinue officiating. A series of studies using versions of the Soccer Officials' Stress Survey (Taylor & Daniel, 1987) were conducted to examine sources of officiating stress and relationships among stress, burnout, and termination intentions. These studies included investigations of intramural and interscholastic volleyball and football officials (Goldsmith & Williams, 1992), rugby union referees (Rainey & Hardy, 1999), high school baseball and softball umpires (Rainey, 1995) and soccer officials certified at the youth level and above (Taylor et al., 1990). Overall, results revealed the effects of stress were marginal and reports of burnout were rare at the time when the studies were conducted. This led to investigations on how officials effectively managed the stress associated with officiating.

The next wave of studies on sports officials focused on coping responses to stress, and several of these studies included cross-cultural comparisons (Anshel & Weinberg, 1999; Kaissidis-Rodafinos & Anshel, 2000; Kaissidis-Rodafinos, Anshel, & Porter, 1997). Findings showed coping styles sometimes differed between cultures; but overall, most officials were able to deal with stressful situations primarily through avoidance responses such as ignoring comments. Two studies focused on officials' perceptions of stress and motives for continuing despite the stress. Kellett and Shilbury (2007) conducted semi-structured interviews with 22 Australian Rules football umpires and found that the umpires were able to reframe abuse they received such that it served as a point of bonding with fellow officials and helped with retention. In fact, most umpires indicated abuse is expected and accepted as a normal part of their role. Similar findings were reported in Wolfson and Neave's (2007) study on English soccer referees. Their results revealed most of the referees expected to be the targets of criticism from players, coaches, and spectators. Nevertheless, they were able to use effective coping strategies and they did not seem concerned about the disparagement. It should be noted that these studies included samples of veteran officials who had been actively involved with officiating for many years and thus had experience in developing effective coping strategies.

More recent research has shifted attention from psychological to more sociological and organizational factors impacting the retention of sports officials. In their study on the social worlds and communities of Australian Rules football umpires, Kellett and Warner (2011) examined elements that both enhanced and

detracted from creating a sense of community among umpires. Factors contributing to a sense of community included an affinity with the sport, interactions with others involved with the sport, and sharing social spaces such as clubrooms. Factors that detracted from sense of community were lack of administrative consideration and inequity in terms of pay and access to resources. In another study on Australian Rules football umpires, Phillips and Fairley (2014) also noted the importance of community and socialization among umpires. They examined umpiring as a form of serious leisure and found that veteran umpires derived identity and meaning from their role as umpires, which was reinforced by cohesion among their umpire group.

Tingle et al. (2014) used a workplace incivility framework to explore the experiences of former female basketball officials. Results indicated four key factors led to discontinuation as an official. These included lack of mutual respect among fellow officials, perceived inequity of policies, a lack of role modeling and mentoring, and gendered abuse. Forbes and Livingston's (2013) study on attrition of amateur ice hockey officials in Canada found organizational factors to be salient contributors to attrition. Specifically, individuals who discontinued their role as an official expressed dissatisfaction with their local hockey associations in terms of opportunities to move up the ranks, appropriate fee structures, training assistance, administrative consideration, and appreciation.

Warner et al. (2013) developed the referee attrition model based on Green's (2005) sport development model. They interviewed 15 former basketball referees and identified 10 themes related to officiating experiences and decisions to discontinue participation. Factors associated with recruitment included staying part of the game, meeting needs for competition and challenge, remuneration, and socialization into the community of officials. At the retention level, problematic social interactions with coaches, parents, and spectators hampered retention. Lack of training/mentoring and lack of community were also classified as problems. At the final stage of advancement, issues leading to attrition included lack of administrator consideration, biased administrator decision-making, and difficulty navigating sport policies that differed between leagues and states. Warner et al. concluded that negative experiences triggered by off-court organizational and managerial issues were the primary contributors to attrition of sports officials.

Conceptual Framework

While participation of sports officials has been examined from a variety of angles, scant attention has been given to the underlying psychosocial construct of leisure involvement. Leisure involvement extends beyond individual motives and mere participation; it looks at the relevance or

meaning of an activity within the context of an individual's overall outlook on life (Wiley, Shaw, & Havitz, 2000). The construct of involvement was first introduced in psychology as part of social-judgment theory (Sherif & Cantril, 1947; Sherif & Hovland, 1961). Psychological involvement has generally been defined as an unobservable state of motivation, arousal, or interest between an individual and an activity or product (Rothchild, 1984). Research applying this construct to sport and leisure contexts has led to support for a three-facet measure of involvement consisting of hedonic value, symbolic value, and centrality (Beaton, Funk, Ridinger, & Jordan, 2011). Hedonic value takes into account feelings of pleasure or enjoyment derived from involvement with a sport product or activity. Symbolic value refers to the importance and meaning individuals ascribe to their association with a product or activity. Finally, centrality refers to the central role a sport activity plays in one's life. Thus, involvement is present when individuals evaluate their participation in a sport or leisure activity as a central component of their life that provides both hedonic and symbolic value (Beaton et al., 2011).

Involvement with a sport or leisure activity can be greatly impacted by constraints, which are factors that can limit people's participation or enjoyment in leisure (Crawford & Godbey, 1987). This is especially relevant for sport officials who work in challenging environments that can be prone to conflicts and stress. Therefore, when examining leisure involvement, it is also important to investigate constraints that may impact involvement. The topic of leisure constraints has received considerable attention in the literature (see Godbey, Crawford, & Shen, 2010). Much of this research has stemmed from the work of Crawford and Godbey (1987), Crawford, Jackson, and Godbey (1991), and Jackson, Crawford, and Godbey (1993) who classified constraints into three categories comprised of intrapersonal constraints, interpersonal constraints, and structural constraints.

Intrapersonal constraints involve psychological states and individual attributes which interact with leisure preferences. Examples of intrapersonal barriers include stress, anxiety, attitudes, perceived skill, and level of confidence. Interpersonal constraints pertain to barriers related to social interactions, social support, and relationships among individuals. For sports officials, interpersonal constraints could be related to interactions with coaches, players, parents, other officials, or administrators. Structural constraints are features of the external environment that intervene between leisure preferences and participation. Examples include lack of financial resources, time limitations, family demands, and conflicts with one's job schedule. Leisure constraints were initially viewed as absolute barriers that prevented participation in a desired leisure activity (Jackson, 1988). However, evidence has

shown that many people can and do participate in leisure activities despite the presence of constraints because of negotiation strategies aimed at removing, diminishing, or modifying barriers to participation (Hubbard & Mannell, 2001; Jackson, et al., 1993; Kay & Jackson, 1991; White, 2008).

The purpose of this study was to gain a better understanding of psychosocial factors that impact involvement with youth sports officiating. This study examined factors that contribute to both psychological and behavioral involvement with officiating as well as constraints that detract from involvement. The literature on leisure involvement and leisure constraints guided this investigation as it explored the three facets of leisure involvement (i.e., hedonic value, symbolic value, and centrality) and the three components of leisure constraints (i.e., intrapersonal constraints, interpersonal constraints, and structural constraints). Additionally, this study focused on officials from two different sports with contrasting features in an attempt to illuminate factors that may explain why one sport struggled to recruit and retain officials while the other maintained a large pool of committed umpires.

Method

Research Design

This study used a phenomenological qualitative approach that involved in-depth semi-structured interviews. Phenomenology focuses on understanding the internal subjective experience associated with observable reality (Henderson, 1991). As noted by Patton (1990), phenomenological inquiry focuses on the question: "What is the structure and essence of experience of this phenomenon for these people?" (p. 69). Realizing that individuals live unique experiences, phenomenology seeks to discover and describe those lived experiences to more deeply understand the multiple realities of a phenomenon. Researchers must attempt to find "commonalities across participants to see how lived experiences relate to a phenomenon of interest" (Hays & Singh, 2012, p. 50). Exploring the thoughts and reflections of baseball umpires and lacrosse officials about their own lived experiences afforded the opportunity to gain a clearer understanding of both contributing and constraining factors associated with their involvement with officiating.

Participants

Data were collected from a purposive sample of 14 participants who volunteered to be interviewed for this study. This study was designed to include youth sports officials with varying years of experiences from two dissimilar sports. Half of the participants were boys' baseball umpires and the other half were girls' lacrosse officials. These two sports were chosen due to their distinct differences. In the mid-Atlantic region of the United States, where this study took place, baseball is a well-established sport whereas girls' lacrosse is an emerging

sport. Umpiring baseball does not require much physical exertion while officiating lacrosse involves a great deal of running. Furthermore, all of the baseball umpires in the region were men and most (76%) of the girls' lacrosse officials were women.

Officiating experience ranged from less than one year to 30 years. One baseball umpire and one lacrosse official were in their first year of training and had not yet worked an actual game at the time of the interviews. The seven baseball umpires were all white males who ranged in age from 21-59. The lacrosse officials included five white and two black females ranging in age from 20-58. Information on participants can be found in Table 1.

Procedure

After obtaining approval from the human subjects review committee, participants were recruited for the study. To gain multiple perspectives, an effort was made to include participants with varying levels of officiating experience and to match years of experience so both groups would have a similar number of veteran and novice officials. This was done through a combination of convenience sampling, snowball sampling, and stratified purposeful sampling. Drawing upon the researcher's personal contacts, convenience sampling was used to recruit initial participants. Next, snowball sampling was used by asking interviewees to recommend other officials who might be interested in participating in this study. Finally, stratified purposeful sampling was used by targeting those recommended individuals who had years of officiating experience that fit the needs of the study. Saturation, common in other forms of qualitative research, is irrelevant in phenomenology (Hayes & Singh, 2012). Phenomenology differs from other forms of qualitative data analysis in that its sole focus is to understand the depth and meaning of participants' experiences rather than to generate theory (Hays & Singh, 2012). Data collection was completed when there were at least two baseball umpires and two lacrosse officials representing each purposeful strata based on years of experience – novice (less than 3 years), mid-range (between 3 and 9 years), and veteran (10 years or more).

All identified officials received an email invitation that explained the purpose of the study and specified that participation was entirely voluntary and all information would remain confidential. Prior to the interviews, participants signed a consent form and provided demographic and behavioral information related to officiating, coaching, and playing experience. Interviews were conducted in an office or other quiet location agreed upon by the interviewee and the researcher.

All interviews were digitally recorded and conducted with the aid of a semi-structured interview guide. This type of data collection instrument allows the researcher leeway in its structure and process once the session begins (Hays & Singh, 2012). Impromptu probing questions were added

as needed, an acceptable method with semi-structured interviews due to the iterative process of qualitative research and the desire to collect rich data (Creswell, 2007). The semi-structured interview guide was designed to glean information about the essence of involvement with officiating (see Appendix). A panel of three experts in sport management and qualitative methodology reviewed the guide for face and content validity. The time for each interview ranged from 33 to 58 minutes. The interviews were professionally transcribed and member checks were conducted by sending all participants a copy of their transcript so they could review their comments and clarify statements to ensure they were portrayed accurately (Neuman, 2000). Pseudonyms were used to conceal the identity of participants.

Analysis

With qualitative inquiry, the researcher is both a data collection instrument (through interviewing) and analytic interpreter. It is important for phenomenologists to be aware of personal bias and bracket out their own assumptions and values as much as possible (Creswell, 2007). While phenomenologists strive to prevent biases, preconceived notions, or subjectivity from influencing a study, they also acknowledge that it is not possible to contemplate a phenomenon without some degree of personal involvement and intentionality (Willig, 2007). The primary researcher in this study had previous officiating experience, thus meeting Hays and Singh's (2012) definition of insider researcher — "research where the investigator is not necessarily part of an organization and/or the phenomenon of inquiry, but rather has knowledge of the organization and/or phenomenon prior to the study's commencement" (p. 140). This role can assist in establishing an epistemological connection by minimizing the distance between the researcher and participants and providing the researcher with an opportunity to better understand the population and more effectively elicit information (Creswell, 2007; Hays & Singh, 2012).

Throughout the data collection and analysis process, bracketing was used in an attempt to eliminate preconceptions, allowing the data to be viewed more openly without prejudgment (Patton, 1990). The transcripts were reviewed independently by two individuals, the primary researcher and a colleague who assisted with the analysis. An initial coding process known as horizontalization was conducted and then the data were grouped into meaningful clusters (Patton, 1990). After the initial independent reviews, the two researchers compared codes until agreement was reached on the generated themes, thus establishing inter-rater reliability (Neuman, 2000). Next, the codes were entered into NVivo 10 software and themes were confirmed. Finally, textual and structural portrayals of themes were developed and verbatim examples were included to

describe participants' experiences and to explain the meaning of their involvement with officiating (Creswell, 2007).

In qualitative research, the concepts of validity and reliability are replaced by the criteria for trustworthiness (Lincoln & Guba, 1985). For this study, trustworthiness was established through a variety of means. Credibility was demonstrated through the use of member checking and providing participants the opportunity to review transcripts to confirm authentic representation and ensure data accuracy (Lincoln & Guba, 1985). Triangulation of data sources was done to ensure the inclusion of multiple participant voices (Hays & Singh, 2012). Dependability was established through the use of two individuals to independently review and code data (Lincoln & Guba, 1985). In addition, data were further analyzed and themes were supported with NVivo software. Transferability was exhibited by using rich and detailed descriptions that allow readers to make decisions about the degree to which findings are applicable to their settings (Hays & Singh, 2012). Finally, confirmability was demonstrated through bracketing to reduce researcher bias (Hays & Singh, 2012).

Results

The data were organized into two main categories related to involvement with youth sports officiating: 1) contributors to involvement, and 2) constraints to involvement. Three themes emerged as salient contributing factors to involvement with officiating. These included *connection*, *support*, and *community*. The other themes identified as contributors to involvement included *hedonic value*, *symbolic value*, and *centrality*, the factors associated with the literature on leisure involvement. In addition, several subthemes emerged. Constraints to officiating involvement included the three themes from the literature on leisure constraints: *intrapersonal constraints*, *interpersonal constraints*, and *structural constraints.* Several subthemes emerged, but no additional constraint categories were identified. The themes and subthemes are depicted in Table 2. In the following section, themes and subthemes of both the contributing and constraining factors associated with involvement with youth sports officiating are presented and representative quotes from participants are shared.

Connection

Participants were asked about how they first became involved with officiating youth sports. The first theme that emerged was connection, defined as having an association with the sport through past experience or via a significant other. All of the baseball umpires had played baseball in high school while only three of the lacrosse officials had been lacrosse players. For two of the lacrosse officials, initial awareness about officiating resulted from their daughters playing the sport and being concerned about the shortage of officials. Heather

decided to start officiating after some of her daughter's games were cancelled due to lack of officials. Gayle was involved with starting a new youth lacrosse league for girls and recognized the need for officials as she explained:

> We were starting a youth league, and we had no youth officials. And so, that went "hand in hand." If we wanted our daughters to play, we needed officials. I didn't know what I was getting into. But, I knew we needed officials.

Another avenue to connect with officiating was by knowing others affiliated with the sport such as commissioners (Nathan, Thomas) athletic directors (Aaron), coaches (Mike), teachers (Ellen, Mary), or officials (Denise, Sara). Thomas shared how he first became involved with umpiring:

> I go to a ton of baseball games. I'm the oldest of five boys. All my little brothers play, and I was constantly out at the baseball field watching them play. The head of the umpires kept seeing me out there, and he convinced me to get into it and start officiating some games. I'm really glad he did. I've really enjoyed it.

Support

Support, another emerging theme, was defined as reinforcement and encouragement from others to stay involved with officiating. Three subthemes emerged for this factor that included (a) *mentorship*, (b) *training*, and (c) *administrative consideration*. There was no formal mentorship program in place for the lacrosse officials and their training requirements were minimal. On the other hand, the baseball umpires had a structured mentorship program, a rigorous training schedule, and they all spoke highly of the consideration and support they received from their commissioner. The more experienced umpires (Steve, Rob, Nathan) enjoyed serving as mentors and the novice umpires welcomed their support as expressed by Mike:

> You get assigned a mentor, and he stays your mentor throughout the entire time you're with the association. And not only do you have the one mentor, but everybody is more than willing to help you in some way. It's nice to have that older official kind of take you under his wing, and say, "Hey look, I messed up too. I still mess up. You're not going to be perfect."

Community

Community was another salient theme that emerged. It was defined as nurturing relationships formed with fellow officials. Mike talked about the importance of relationships among the baseball umpires as he expressed, "It's like a family atmosphere kind of. You build these relationships with each other, and they become like your brothers." When Thomas was asked what he would miss most if he had to stop umpiring, he said, "What I'd probably miss most would be the family orientation. Those guys are great. Man, I love them all. They're the best! And they really care about you."

Nathan noted that most of his friend base was comprised of officiating colleagues. He talked about attending various sporting events around town and often running into fellow umpires who were also at the games. The lacrosse officials did not seem to have the same sense of community. When asked if they had many friends who also officiated, Mary said with a smile, "No, my friends all think I'm kind of crazy for being an official." Gayle laughed as she responded, "Only because I got them involved in it!" Ellen, who also officiates field hockey, basketball and volleyball, was the only lacrosse official who indicated most of her friends were officials.

Hedonic Value

When participants were asked about positive aspects of officiating and factors associated with their initial and continued involvement, six subthemes emerged related to hedonic value, which was defined as feelings of pleasure or enjoyment derived from officiating. The hedonic value subthemes included: (a) *enjoyment*, (b) *love of the sport*, (c) *staying involved*, (d) *being physically active*, (e) *challenge,* and (f) *opportunity to earn money*. For both the baseball umpires and lacrosse officials, enjoyment and love of the sport were the most frequently mentioned factors. As Gayle expressed, "I love officiating. And I tell people that every day. It's the best job ever, besides being a parent." Staying involved with the sport was appealing to all of the umpires and officials older than 40. Reminiscing about why he first started umpiring, Nathan said, "You know, I got to the point where I wasn't as good at being an athlete, so I wanted to still be part of a game." Rob explained how he wanted to coach, but did not have time to commit to the regular practice and game schedules associated with coaching; however, the flexibility of an umpire's schedule afforded him the opportunity to stay involved with a sport he loved.

All of the lacrosse officials talked about how officiating was a good way to work out and stay physically active. None of the baseball umpires mentioned any benefits related to physical fitness. All of the participants younger than age 30 were attracted by the opportunity to earn money. Some of the more experienced officials acknowledged that pay was an initial attractor for them, but it was no longer the primary motive for their continued involvement. Both Sara and Zach, the two participants in training but with no actual game experience, were aware of the amount of money that could be earned and admitted it was the most enticing factor. Several of the participants were attracted to the challenge of officiating (Aaron, Denise, Mary). Most individuals talked about a combination of motives as illustrated by Heather's comments:

> I liked the activity, and the fact that I was able to run, and basically do something with my time, other than just sit there and watch my daughter play or practice…A love of the sport, and just the fact that it's a way to stay in shape.

> And it's a way to stay involved with the sport. It's fun. I enjoy being out there.

Symbolic Value

Another theme explored was symbolic value. Symbolic value was defined as importance or meaningfulness derived from involvement as an official. All of the baseball umpires and four of the lacrosse officials stated that officiating was an important part of their lives and many conveyed meaningfulness as a sense of pride in being a good official and calling a fair game (Denise, Ellen, Gayle, Heather, Aaron, Nathan, Rob, Steve, Thomas). As expressed by Thomas, "I want to do the best I can every time I'm out there. And make sure that everything is done legally, safely, and properly."

Centrality

Centrality refers to the central role officiating plays in one's life. Eight of the participants talked about modifying their work and school schedules to allow more time for officiating (Rob, Steve, Mike, Thomas, Mary, Ellen, Heather, Gayle). Mary, who is semi-retired, officiates eight months of the year and she blocks out her schedule from two o'clock forward. In her previous job, part of her initial negotiations for the job included leaving work early on Fridays to officiate. Heather noted that prior to a recent injury, the majority of her life revolved around her officiating schedule. Ellen commented, "When I'm not teaching school, I'm officiating and when I'm not officiating, I'm training to officiate so it's a big part of my life." Mike, a graduate student described how he organizes his academic and social life around umpiring:

> My schedule is centered around umpiring. When I signed up for graduate school, I had to make sure that the classes I signed up for would still give me enough days open to umpire. And I tell my friends, "Hey, this Friday night I can't go out because Saturday morning I've got to be up. I've got games." But, it doesn't bother me, because that's what I want to do. Umpiring is the center of my schedule. It's what I want to do so I'll make the time for it.

Intrapersonal Constraints

Participants were asked about psychological constraints that might impact their ability or reduce their desire to officiate. Intrapersonal constraints involve psychological states and individual attributes which interact with one's preference to officiate. For the less experienced officials, lack of confidence and anxiety were noted and these were more problematic for the lacrosse officials. Although Kelly had experience as both a lacrosse player and a coach, she admitted to getting nervous before each game because she does not officiate often. Sara's biggest fear was making a wrong call and being yelled at. She commented:

> Youth sports parents get really worked up. So, it's hard to like, do well right away, or have the confidence right away. No matter what, someone's gonna be yelling at you. I know I wouldn't want to be that person that people are like, "Oh my gosh, you're messing up the game for us."

The baseball umpires talked about how they were a little nervous when they first started, but were able to move past their fears due to training and mentorship. All of the baseball umpires were very confident, even the younger, less experienced ones.

> When I first started out, I was a little nervous. But now that I've been doing it for about a year, I've seen improvements in my game. I'm much more confident - I know that I'm right, I know what I'm talking about, and I know what I'm doing. I've studied the game hard and I know the rule book. (Thomas)

Interpersonal Constraints

Interpersonal constraints pertain to barriers to officiating related to social interactions, social support, and relationships among individuals. The subthemes that emerged were: (a) *lack of support*, and (b) *lack of community*. Interpersonal constraints can result from conflicts with any number of stakeholders including coaches, players, parents, fans, other officials, and/or administrators. There was little consistency among the lacrosse officials about the source of the conflict. Heather and Kelly had issues with coaches and some officials. Sara was concerned about coaches, parents, and players. Mary talked about challenges with fans, players, and past administrators. None of the baseball umpires in this study viewed interpersonal conflicts as problematic. They all believed conflicts "came with the territory" as expressed by Thomas:

> Half the people think you're wrong. And that's okay. You can't make everybody happy. But it doesn't bother me. They - the fans get on you a little bit. "Oh, come on Blue" or "Come on Ref," you know, whatever. And that's okay, as long as you're doing the right thing. And I've never had a problem with another official, and I don't think I ever will. We're too tight for that. We're a family.

Lack of support was an interpersonal constraint identified by the lacrosse officials. Ellen noted, "We just don't have the numbers to set up a formal mentorship program." She also had concerns about training deficiencies and stated, "You have to train people…you can't just throw them out there. We need to start training earlier, not just two weeks before the season." Kelly commented about the lack of rigor with the local training for lacrosse officials. She said, "And the training sessions - I went to one. But I think they're so strapped for officials that they are a little bit lenient, especially for people who kind of know what they're doing." Mary shared how administrative consideration was lacking

when game assignments were made for a summer tournament.

> I was assigned seven lacrosse games on the same day, and I sent an email off, and said, "There's no possible way in the world I can do seven games in a day." The assignor was a bit offended. So, I got reassigned, and the partner I was with was doing nine games! When I left him after the fifth game, he could barely walk. He was not performing well and it wasn't good for the game.

None of the baseball umpires in this study encountered a lack of support. In fact, there were many accolades given about the excellent support they received. Nathan explained how the local baseball association has had a formal mentoring program in place for the past four years and it is working well. He also noted they had a structured six week training program, evaluators who provided performance feedback to umpires throughout the season, and a very supportive commissioner. Mike clearly appreciated the support as he stated:

> I think that the association I'm with does an excellent job of making sure everybody gets a fair amount of the games. There is an extreme loyalty to the officials from our commissioner. You know he has your back. He keeps the best interests of the officials in mind at all times.

The mentorship and support provided to the baseball umpires led to a strong sense of community. In contrast, lack of community was identified as an interpersonal constraint for the lacrosse officials. While some camaraderie was evident among the veteran lacrosse officials, the novice lacrosse officials did not have enough time interacting with other officials to build a sense of community.

Structural Constraints

Structural constraints are features of the external environment that intervene between one's preference to officiate and actual participation in officiating. Several subthemes emerged related to structural constraints including: (a) *job and/or school schedules*, (b) *family demands*, and (c) *time spent traveling and training*. The most frequently mentioned obstacle for both baseball umpires and lacrosse officials dealt with time conflicts due to job schedules. Several of the umpires successfully negotiated through this constraint by modifying their working hours.

> I start work at six o'clock in the morning during the spring so that I'm able to leave at two thirty to make the games, whether I'm scheduled for a game or not. I'm always available because I get called out. It's not uncommon to get a call that another umpire had to cancel at the last minute. (Rob)

Mike struggled with trying to balance grad school with umpiring while Gayle spoke about family demands as she stated, "Just trying to juggle, you know, this parenting, and getting on the field for the games, because it's the same time, the demand for

my time is at the same time of the day." Travel time to local games was viewed as problematic by three individuals (Kelly, Gayle, Aaron). Time for training was a concern for the novice lacrosse officials. In comparison to the lacrosse officials, the baseball umpires spent much more time at training sessions; however, none of them complained about the time invested in training. In fact, Thomas commented, "The classes are definitely not a burden. I love going to the classes. I learn something every class."

Discussion

Shortages of sport officials are impacting sport organizations at all levels (Cuskelly & Hoye, 2004; Thornley, 2010). Thus, there is a need to better understand factors associated with officiating involvement. This study was designed to compare and contrast the experiences of officials from two distinct sports to gain a better understanding of underlying psychosocial connections individuals have with officiating involvement. Seven boys' baseball umpires and seven girls' lacrosse officials were interviewed about contributing motives and constraining factors associated with their involvement with youth sport officiating. The results revealed some similarities shared by these two groups; however, there were also notable differences, especially in regard to support and community.

Contributors to Involvement

Contributors to involvement were classified into six themes – connection, support, community, hedonic value, symbolic value, and centrality. Similar to the findings of Furst (1989, 1991) and Purdy and Snyder (1985), individuals in this study became involved with officiating primarily through a personal connection with the sport. All of the baseball umpires had played baseball in high school whereas only three lacrosse officials had playing experience. Opportunities to play lacrosse in high school did not exist for most of the lacrosse officials. Instead, their connections were through their daughters who played lacrosse or through friends who officiated. In emerging sports such as lacrosse, the pool of potential officials with playing experience is smaller. Therefore, greater effort is needed in the recruitment process. Also, without a background in the sport, there is a steeper learning curve to understand the rules, mechanics, terminology, and nuances of the sport. Thus, additional training may be needed. Interestingly, however, the training for lacrosse officials in this study was deficient in comparison to the training received by baseball umpires. This was primarily due to the shortage of girls' lacrosse officials in the region and subsequent scarcity of individuals to organize and implement training sessions.

The most striking contrasts between the baseball umpires and the lacrosse officials were in regard to support (mentorship,

training, and administrative consideration) and community. The findings from this study echo conclusions from previous research that identify organizational support as a key factor for retaining officials (Forbes & Livingston, 2013; Kellett & Warner, 2011; Tingle et al., 2014; Warner et al., 2013). The local baseball association had a structured mentorship program in place and much more rigorous training requirements in comparison to the local lacrosse association. The impact of this support was profound and ramifications were evident. The mentorship program and training sessions cultivated confidence and led to a strong sense of community among the baseball umpires. Previous research has revealed that a sense of community can promote greater identity with one's role as an umpire (Phillips & Fairley, 2014), it can help umpires learn how to deal with abuse (Kelly & Shilbury, 2007), and it contributes to referee retention (Kellett & Warner, 2011; Warner et al., 2013).

A collective sense of community was not evident for the lacrosse officials. In contrast to the local baseball umpires' association, the lacrosse officials' association did not have a full-time paid commissioner to plan and manage the training and development of officials. The local leaders of the girls' lacrosse officials' association were doing their best to recruit and retain officials, but they faced many challenges. There was a very limited pool of potential officials in the region with any type of connection to girls' lacrosse. Also, the lacrosse leaders were constrained by their own full-time jobs and other obligations.

When asked about positive aspects of officiating, a number of subthemes related to hedonic value emerged. These included enjoyment, love of the sport, staying involved, being physically active, challenge, and opportunity to earn money. Surprisingly, enjoyment has not been highlighted in previous literature. Perhaps this is because much of the research on referees has focused on negative issues related to stress and attrition. The hedonic subthemes of love of the game, staying part of the game, and challenge all support previous findings related to officiating motives (Furst, 1991; Purdy & Snyder, 1985; Warner et al., 2013). Physical fitness was identified as a motive in previous studies on ice hockey referees (Forbes & Livingston, 2013) and Australian Rules football umpires (Phillips & Fairley, 2014). In the current study, being physically active had hedonic value for lacrosse officials, but not baseball umpires. For sports that require physical exertion, promoting officiating as a way to stay in shape may be a good way to recruit physically active individuals.

Similar to Warner et al.'s (2013) results on remuneration, this study found the opportunity to earn money was an attractive feature for newer officials; however, continued involvement with officiating was more dependent on symbolic value and support. For both baseball umpires and lacrosse officials, symbolic value became important as officiating took on more

meaning and became a central part of their lives, a finding similar to Phillips and Fairley's (2014) investigation. Thus, strategies and communication tactics designed to recruit new officials may need to be crafted differently than those used to retain veteran officials.

Constraints to Involvement

Constraints were perceived as more problematic for lacrosse officials. Intrapersonal constraints are related to psychological states and individual attributes. Three of the novice lacrosse officials expressed apprehensions about lack of confidence and anxiety; however, all of the baseball umpires, even the novice ones, exuded confidence. Due to past playing experience, mentoring, training, administrative support, and a strong sense of community, the baseball umpires were better equipped to overcome any intrapersonal concerns. There was also a notable contrast between lacrosse officials and baseball umpires in their perceptions of interpersonal constraints. These constraints involve barriers related to social interactions, social support, and relationships among individuals. Lack of support and lack of community were issues impacting the lacrosse officials, but not the baseball umpires. Almost all of the lacrosse officials acknowledged having interpersonal conflicts with various sport stakeholders. The baseball umpires, on the other hand, were not bothered by conflicts with coaches, players, or fans. Similar to the findings of Kellett and Shilbury (2007) and Wolfson and Neave (2007), the baseball umpires expected and accepted interpersonal conflicts as part of their role.

Structural constraints are features of the external environment that intervene between leisure preferences and participation and these were common to lacrosse officials and baseball umpires alike. Both groups identified full-time jobs conflicting with game times as the most problematic structural constraint. A number of the participants were able to negotiate through this constraint by modifying their working hours. In regard to resources, the baseball umpires' association had a full-time paid commissioner to oversee the training of umpires and the assigning of games. In contrast, the lacrosse officials' association had a part-time assigner who received a small commission for assigning games. Training and development of the lacrosse officials was done on a volunteer basis by a few of the veteran officials. Although it was noted that excellent training resources were available from the national lacrosse association, it was not possible to effectively implement these materials and provide one-on-one mentorship due to insufficient numbers of veteran lacrosse officials at the local level.

Implications

The purpose of this study was to gain a better understanding of underlying psychosocial factors that impact involvement with youth sports officiating by

comparing and contrasting the experiences of officials from two distinct sports. This research has both theoretical and practical implications. Theoretically, it is the first to apply the constructs of leisure involvement and leisure constraints to the context of sports officiating. Although findings are not generalizable beyond the sample due to the qualitative design, this work provides a unique perspective to understanding the nexus between support and overcoming constraints. By investigating two divergent officiating situations, prominent differences emerged. The most salient finding was the impact of support on helping the novice baseball umpires to overcome fears (intrapersonal constraints) and to develop confidence in dealing with confrontational social situations (interpersonal constraints). In addition, the support received by the baseball umpires led to a strong sense of community which seemed to contribute to greater centrality and symbolic value associated with their role as an umpire. All of the baseball umpires were willing to modify their work and social schedules to carve out time for umpiring. While this was also true for the veteran lacrosse officials, the novice lacrosse officials were less inclined to rearrange their lives to make officiating a central priority. The lacrosse officials perceived more constraints to involvement, which were exacerbated by a lack of support and lack of community.

Given the growing concerns about declining numbers of sports officials, efforts to attract new officials and strengthen connections with current officials is important. Building a sustained base of qualified sports officials is vital to meeting the needs of sports leagues and organizations. Practical implications gleaned from this study can inform strategies for recruitment and retention of officials. Knowing that initial entry into officiating often comes from a personal connection to the sport, a pool from which to recruit potential officials could be current or former players, coaches, and/or parents of athletes. For emerging sports with fewer former players, it may be necessary to widen this pool to also include athletes and officials from other sports. While these individuals may not have a strong personal connection to that particular sport, there could still be hedonic value related to the activity of officiating such as enjoyment, challenge, being physically active, and staying involved with sports in general. Also, the opportunity to earn money is attractive to most novice officials so promotional materials used to recruit new officials should highlight financial rewards.

To retain current officials and strengthen their attachment to officiating, it is important for sport associations to provide support. Mentoring and training programs along with administrative consideration can assist officials with negotiating constraints and provide them with a nurturing community, leading to greater involvement with officiating. However, a critical mass of qualified individuals is needed to implement these

programs and this may be lacking with emerging sports.

Limitations and Future Research

As with all research, there are limitations to be noted. This study focused on officials of just two youth sports in one region. While these two sports were purposely selected due to their distinctions from one another, there may be features unique to these sports and/or the local officials' associations that do not transfer to other sport populations. The interviewees volunteered to participate in this study and their willingness to discuss their officiating experiences could reflect a pre-existing enhanced connection with the activity. The sample included umpires and officials currently involved with their sport and their perceptions may differ from officials who have discontinued involvement with officiating. While both men and women participated in this study, these two groups of individuals did not officiate the same sport and thus, comparisons attributable to gender would have been speculative. Further research is needed to understand how gender informs officiating involvement. Future studies should include samples with male and female officials from the same or similar sports (e.g., baseball/softball and girls'/boys' lacrosse) to glean greater knowledge related to gendered aspects of sports officiating. Also, further research is needed to better understand the unique challenges faced by administrators of emerging sports as they struggle to recruit and retain officials. Finally, this study, along with much of the recent research on sports officials, is qualitative and therefore limited to a small sample. Future investigations utilizing quantitative survey methodology could capture views from a much larger and diverse population of sports officials.

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Tables

Table 1

Participant Information

Pseudonym	*Age*	*Sport/s Officiated*	*Years as an Official*	*Playing Experience*	*Coaching Experience*
Rob	56	Baseball	30	Yes	Yes
Steve	59	Baseball	22	Yes	Yes
Nathan	50	Baseball	10	Yes	No
Aaron	30	Baseball & Football	7	Yes	No
Mike	22	Baseball	4	Yes	No
Thomas	22	Baseball	1	Yes	No
Zach	21	Baseball	<1	Yes	Yes
Mary	58	Lacrosse & Field Hockey	30	No	Yes
Ellen	52	Lacrosse, Field Hockey, Basketball, Volleyball	20	Yes	No
Heather	46	Lacrosse & Field Hockey	11	No	No
Gayle	47	Lacrosse	7	No	Yes
Kelly	25	Lacrosse	4	Yes	Yes
Denise	39	Lacrosse	1	No	No
Sara	20	Lacrosse	<1	Yes	No

Table 2

Themes Related to Involvement with Officiating

Contributors to Involvement

- ***Connection*** - having an association with the sport through past experience or via a significant other
- ***Support*** – reinforcement and encouragement from others to stay involved with officiating
  - Subthemes
    (a) *mentorship*, (b) *training*, and (c) *administrative consideration*
- ***Community*** – nurturing relationships formed with fellow officials
- ***Hedonic Value*** – feelings of pleasure or enjoyment derived from officiating
  - Subthemes
    (a) *enjoyment*, (b) *love of the sport*, (c) *staying involved*, (d) *being physically active*, (e) *challenge*, and (f) *opportunity to earn money*
- ***Symbolic Value*** - importance or meaningfulness derived from involvement as an official
- ***Centrality*** - the central role officiating plays in one's life

Constraints to Involvement

- ***Intrapersonal Constraints*** - psychological states and individual attributes which interact with one's preference to officiate
- ***Interpersonal Constraints*** - barriers to officiating related to social interactions, social support, and relationships among individuals
  - Subthemes
    (a) *lack of support,* (b) *lack of community*
- ***Structural Constraints*** - features of the external environment that intervene between one's preference to officiate and actual participation in officiating
  - Subthemes
    (a) *job and/or school schedules*, (b) *family demands*, (c) *time traveling and training*

Appendix

Interview Guide

1. How did you first get involved with officiating?
2. Why do you continue to officiate?
3. What are the positive aspects of officiating?
4. How important or meaningful is officiating to you?
5. Is a lot of your life organized around officiating?
6. Do you have a lot of friends who also officiate?
7. Tell me about your officials' association and your involvement with its administration.
8. What are the biggest risks or challenges associated with officiating?
9. What are some of the constraints that impact your ability or desire to officiate?
    a. Intrapersonal
    b. Interpersonal
    c. Structural
10. What would you miss most if you stopped officiating?
11. What can be done to recruit new officials?
12. What factors are important in retaining current officials?