

Innovating Youth Tournament Schedules to Minimize School Absenteeism: An Exploratory Study

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Participation in sport has been lauded for the myriad benefits provided to youth who engage. Similarly, attendance in school has been identified as a salient contributor to academic success. Thus, the purpose of the present study was to explore the extent to which participation in youth representative (“rep”) hockey in Ontario contributes to *avoidable* absences from traditional school contexts. Specifically, empirical data from 104 youth rep hockey tournaments, ranging from AE-AAA competitive levels, and the Tyke (7-year-olds) to Midget (17-year-olds) age ranks, were utilized to meet the study’s first purpose. The second purpose was to present an alternative and innovative way youth sport tournaments could be scheduled to minimize school absenteeism. The results of the current investigation show there is merit to the proposed shift in tournament scheduling. Specifically, more than 42,000 avoidable school absences, from the 104 tournaments sampled, could be mitigated with a simple adjustment to tournament schedules.

Keywords: sport innovation, youth sport, school absenteeism, tournaments, “rep” hockey, community sport organizations (CSO)

Problem Framing

Canadian youth sport participants demonstrating capabilities in their sporting endeavors will often engage in tryouts to play on higher-level, representative (“rep”) teams; this is parallel to “travel” teams in the United States. There are myriad demands of such higher pursuits, including time away from school

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to partake in tournaments. As a parent (and coach) with children playing on successful hockey teams throughout their rep years, little additional thought was given to this predicament; indeed, events began on Friday and we expected to be playing on Sunday. It was simply a part of playing on the team. However, while driving to Eastern Ontario early on a Friday morning in 2017, conversations with a co-coach/friend sparked the genesis of this study. Discussing our busy work schedules while kids bantered about classes they were missing, Devin said: *“At least we have a chance to win; think about all of the teams missing school today who won’t even play on Sunday!”* Anecdotally, we knew this dilemma existed; understanding the extent and prevalence of the problem required research. Thus, we developed the present study to understand how many avoidable school days were being missed by students as a result of rep hockey tournaments in Ontario. Additionally, we brainstormed possible solutions whereby the essence of traditional hockey tournaments wouldn’t be compromised. The concept of a Saturday–Monday format emerged as a solution to the problem.

Introduction

The development of youth through sport participation is “fundamentally positive” (Coakley, 2011, p. 307). Indeed, researchers from a variety of disciplines (e.g., psychology, sociology, sport management) have supported Coakley’s (2011) claim, highlighting the ancillary benefits gained through sport participation. Specifically, youth who participate in sport have been associated with higher self-esteem (Findlay & Coplan, 2008); more positive mood states, enhanced emotional control, and social adequacy (Marsh & Kleitman, 2003); and are less likely to regularly engage in health risk activities (e.g., smoking; Taliaferro, Rienzo, & Donovan, 2010). In addition, improved scholarly performance is noted as a benefit of sport participation (Coakley, 2017). To be sure, many studies have been produced that link sport participation to increased grade point averages, more positive attitudes toward school, more interest in pursuing post-secondary education, and lower rates of absenteeism (e.g., Brown, 2016; Coakley, 2017; Guest & Schneider, 2003; Lipscomb, 2007; Marsh & Kleitman, 2003; Schultz, 2017; Troutman & Dufur, 2007).

Benefits of youth sport participation and school-related effects are, clearly, myriad; of interest for the current study, however, is the impact youth sport participation has on school absenteeism. Specifically, this study investigates absenteeism experienced by youth rep hockey players in Ontario, Canada. Here, as the desire for youth sport experiences continues, infringements upon other development experiences—like school and family togetherness—have emerged (Campbell & Parcels, 2013; Green, 1997; Hyman, 2009; Torres & Hager, 2007; Trussell & Shaw, 2012).

Clearly, student success is important to parents, educators, and government stakeholders. As such, researchers (e.g., Kitsantas, Steen, & Huie, 2017; Patrick, Ryan, & Kaplan, 2007; Stanca, 2006) have dedicated attention to factors that predict academic performance and achievement. In addition to psychosocial factors that influence student success, much of this body of literature has also identified physical attendance in the classroom as one of the most salient predictors of academic performance across diverse ages and education settings (Stanca, 2006). Indeed, being present assists students to stay up to date with course material and learn in ways consistent with curriculum designs (Epstein & Sheldon, 2002). Moreover, physical attendance in class maximizes students' opportunities to engage with teachers, ask questions, clarify ideas, raise concerns, and receive necessary feedback on assignments and tests.

Beyond the classroom, researchers have regularly associated sport participation with enhancing the physical, psychological, and social well-being of youth (Bailey, 2006; Côté & Fraser-Thomas, 2007; Fraser-Thomas, Côté, & Deakin, 2005; Lesyk & Kornspan, 2000; Vanresusel et al., 1997; Weirisma, 2000). Here, specific to the Canadian context, True Sport, an organization dedicated to using sport as a vehicle for positivity in local communities, produced a comprehensive report on the value of sport to Canadian society. The report revealed that "92% of Canadians believe that community sport can have a positive influence in the lives of youth" (True Sport, 2016, p. 10). Some of the benefits of sport participation for Canadian youth that True Sport (2016) emphasized were an increased sense of well-being, improved social networking skills, enhanced classroom performance, and a limited propensity to commit petty crimes.

Study Purpose

As noted, absenteeism can have an influence on student success in the classroom (Stanca, 2001). However, the nature and pervasiveness of this issue has remained largely anecdotal in the youth sport literature. To our knowledge, no previous scholarly investigation has attempted to track and measure the scope of absenteeism in the context of youth sport. Generating these insights can serve to challenge the status quo of youth sport. We advance the position that empirical data can play a key role in driving innovations related to the delivery and scheduling of youth sport competitions. Thus, the purpose of the present study is twofold: (i) to explore the extent to which participation in elite youth hockey in Ontario results in *avoidable* absences from traditional (e.g., public) school contexts; and (ii) present an alternative and innovative way elite youth hockey tournaments can be scheduled to minimize *avoidable* absenteeism. Specifically, the idea being proposed is to move traditional Friday–Sunday tournament schedules to a Saturday–Monday schedule. Following the proposed schedule,

teams would complete their round-robin game schedule on Saturday and Sunday (instead of the traditional Friday–Saturday); thus, under the proposed format, players on teams that do not qualify for further play (after the round-robin) would miss no school, unnecessarily, to participate in these hockey events. Those teams that do progress to semifinals and finals competitions would do so on Monday.

To achieve these ends, we situate our study in the context of elite youth hockey participation in the province of Ontario, Canada. Specifically, this study relies on Ontario-based boys' youth hockey tournaments to form the context of this study. We hope the current study informs the development of a larger knowledge transfer collaborative initiative. In particular, we hope our data helps facilitate a discussion among parents, athletes, destinations, and tournament organizers. Indeed, our study is intended to raise awareness about issues related to avoidable absences, and inform tournament scheduling strategies across the province, to deliver the best youth sport experience.

Literature Review

The structure and delivery of North American youth sport emphasizes athlete development, competition, and winning (Green, 1997; Hyman, 2009; Torres & Hager, 2007). As a result, it is not uncommon for youth athletes to forego time in the classroom for training or competition within their sport. Around the world, many countries have chosen to structure their youth sport systems to focus on developing physical literacy instead of elite competition and winning (Coakley, 2017). Specific to ice hockey, many European ice hockey federations focus energies on individual skill development until participants approach or enter their teenage years (Campbell, 2017). This approach to youth sport limits the amount of school days missed by young athletes as a result of traveling for competition. As noted by education experts, increased absenteeism is detrimental to a student's learning potential and overall development (Epstein & Sheldon, 2002). Even with the well-documented benefits of sport participation for youth (e.g., problem solving, communication), and the merits of rep sport specifically (Chard, Edwards, & Potwarka, 2015), it should not be considered a substitute for time spent in the classroom.

Youth Sport Tournament Research

An interesting and understudied component of the youth sport experience surrounds tournament competition. With few exceptions (e.g., Kaplanidou & Gibson, 2012; Wigfield & Chard, 2018), researchers have yet to offer a thorough analysis of the practices of tournament operations and their contribution to the youth sport experience. One takeaway, however, from Wigfield and Chard's (2018)

work on perceptions of ideal hockey tournaments was that parents consider these events to be essential experiences for those involved in a rep program. Considering the perceived importance of tournaments to the youth sport experience, multiple stakeholder groups (i.e., athletes, parents, tournament operators, municipalities) would stand to benefit from an increase in scholarly analysis of these offerings. Similarly, as Newell and Swan (1995) noted years ago, it is integral that managers of youth sport are challenged with innovative thinking.

Innovation in Sport Organizations

An extensive amount of management literature has identified innovation as an integral managerial competency that contributes to organizational effectiveness (Caza, 2000; Damanpour & Schneider, 2006; Wolfe, 1994). Despite its importance, innovative thinking remains slow or is often opposed in tradition-bounded industries, such as sport (Hoeber & Hoeber, 2012; Wolfe et al., 2007). In this context, innovation is defined as “any idea, practice, or material artifact perceived as new by the relevant unit of adoption” (Zaltman, Duncan, & Holbek, 1973, p. 10). With a focus on community sport organizations (CSOs), it has been noted that many of these organizations have a culture of informality and are reliant on tradition in the delivery of their sport (Taylor, 2004; Thiel & Mayer, 2009). Hoeber and Hoeber (2012) note that these characteristics may serve as deterrents for innovative thinking in CSOs. However, recent research completed by Hoeber, Doherty, Hoeber, and Wolfe (2015) challenge the labeling of CSOs as risk adverse (Damanpour, 1996; Hull & Lio, 2006) and lethargic when responding to environmental change (Thiel & Mayer, 2009). More specifically, the research of Hoeber et al. (2015) reveals that CSOs are actively seeking innovations that exercises small changes to program delivery (i.e., process-related change).

While much debate could be had around the topic of CSOs and innovation/stagnation, the current study does not investigate the nature or diffusion of an innovation. Instead, a disruptive strategic innovation lens is employed to challenge the traditional delivery of elite youth hockey tournaments. Here, a disruptive strategic innovation is a type of advancement that leads to a new way of doing business, one that is both *different* than, and in *conflict* with, the traditional way of operating (Charitou & Markides, 2003; Christensen, Raynor, & McDonald, 2015; Pegoraro, 2014). Some of the most highly publicized disruptive strategic innovations include Uber, within the taxi business (Christensen et al., 2015), as well as Twitter’s impact on the distribution of news and communication between people in all blocks of life (Pegoraro, 2014). Within the context of sport, one of the most widely cited disruptive strategic innovations has been the use of sabermetrics or advanced statistics in professional sport (Mason & Foster, 2007; Wolfe et al., 2007). In a similar vein, this study employs empirical data to challenge a

traditional method of operation by CSO managers (i.e., tournament schedulers). To be sure, the use of data to drive decision-making is fundamental in business organizations (Davenport, 2006; Janssen, van der Voort, & Wahyudi, 2017). To this end, data utilization has been described as a key resource for organizations (Abbasi, Sarker, & Chiang, 2016), and, specifically, a resource to stimulate innovation (van den Broek & van Veenstra, 2015).

Method

Empirical Setting

Hockey is one of the most popular sports in Canada, with more than 637,000 registered participants nationally (Hockey Canada, 2017). The province of Ontario has the highest participation numbers, with more than 254,000 registrants (Hockey Canada, 2017). The Ontario Hockey Federation (OHF) accounts for 221,388 of these players (Hockey Canada, 2017). As the governing body of youth hockey in Ontario, the OHF annually sanctions more than 300 tournaments each season. In the 2017–2018 hockey season, the OHF sanctioned 304 tournaments to be hosted by its member organizations.

Given the OHF is the largest branch within Hockey Canada’s youth portfolio and the organization offers the most tournaments at the youth level, the OHF was the ideal organization to study considering the current inquiry. Tournaments with games scheduled from Friday–Sunday, which are the traditional offerings, were the primary focus of the investigation. Some events, however, offered competitions beginning on Wednesday or Thursday, where local participating teams principally played in the evenings, before adopting the traditional tournament schedule beginning Friday morning (e.g., Toronto Titans Midget Showcase). As such, these competitions’ Friday schedules were included in the analysis while the Wednesday/Thursday portions were not. In addition, tournaments with traditional schedules that fell on Canadian Thanksgiving (i.e., Whitby Thanksgiving Classic) were removed from the inquiry given the participants would not be in school on these statutory breaks.

Data Collection

Each member organization of the OHF (Greater Toronto Hockey League [GTHL], Minor Hockey Alliance of Ontario [ALLIANCE], Northern Ontario Hockey Association [NOHA], and the Ontario Minor Hockey Association [OMHA]) sanctions tournaments to be hosted by individual clubs, or CSOs, each season. Details of the event are entered under the “Tournament Listings” page of the member organization’s website (e.g., <http://www.gthlcanada.com/tournaments>).

Every tournament that was listed on an OHF member website was included in the universe of tournament offerings for inclusion in the study ($N = 304$). After a tournament had taken place, the researchers searched for the schedule and results of the competition. Tournament results, unfortunately, are not automatically listed on the “Tournament Listings” page. As a result, only tournaments with full schedules and results that were readily accessible (i.e., complete scores, delineated daily schedules, and tournament records) were copied into a Microsoft Excel file (104 of the 304 listings; 34%). Information pertaining to the tournament’s offering branch, competition dates, competition days, and participating teams were recorded.

Data Analysis

Final tournament schedules and results (see Table 1 for an example) from the CSO’s website, or from a third-party organization charged with managing the tournament’s game reporting (i.e., Point Streak), were captured. Specifically, all teams in a tournament were listed and their game schedule recorded to see if they played on Friday yet did not advance to play on Sunday.

Results

Overall, 104 youth hockey tournaments, representing age groups from Tyke (7-year-olds) to Midget (16-year-olds) and playing level AE through AAA were analyzed. In sum, 4,639 team entries (not unique teams given that rep teams enter multiple tournaments annually) played in the 104 tournament competitions. Of these team entries, 2,129 qualified—or the tournament setup simply scheduled them—to play on Sunday. This left 2,510 teams (54%) playing tournament games on Friday but not advancing/competing in scheduled games on Sunday. Table 2 gives a breakdown of the number of teams, from each Division, demarcated by tournament host association, that played Friday games but did not play on the final day of the weekend. Given that teams typically consist of 17 players (nine forwards, six defensemen, and two goalies), a cumulative total of approximately 42,670 ($2,510 \times 17$) *avoidable* school days were missed because of traditional Friday–Sunday tournament scheduling (see Table 3). According to the Ontario Ministry of Education (2017), there are 194 days in an academic year; thus, the 104 tournaments in the current sample contributed to the equivalent of 219.9 ($42,670/194$) years of *avoidable* school days missed.

In response to our second purpose, a simple adjustment to the playing schedules in the tournaments sampled—to a Saturday–Monday format rather than the traditional Friday–Sunday offerings—would have saved approximately 42,670 school days being missed *unnecessarily*.

Table 1. An Example of a Traditional Tournament Schedule and Results for Bantam Age Group

Time	Venue	Visitor	Score	Home	Score
Friday, September 15, 2017					
9:00 a.m.	ADM	Clarington Toros	4	Peterborough Petes	4
9:15 a.m.	IGA	Oshawa Minor Generals	0	Northumberland Nighthawks	5
1:40 p.m.	ADM	Windsor Jr. Spitfires	1	Rideau St. Lawrence Kings	4
1:55 p.m.	IGA	Seaway Valley Rapids	0	Burlington Eagles Gold	5
5:10 p.m.	ADM	Burlington Eagles Gold	3	Clarington Toros	0
5:25 p.m.	IGA	Peterborough Petes	3	Seaway Valley Rapids	1
6:35 p.m.	IGA	Northumberland Nighthawks	5	Windsor Jr. Spitfires	1
7:45 p.m.	IGA	Rideau St. Lawrence Kings	3	Oshawa Minor Generals	2
Saturday, September 16, 2017					
8:15 a.m.	IGA	Burlington Eagles Gold	3	Peterborough Petes	1
9:25 a.m.	IGA	Seaway Valley Rapids	4	Clarington Toros	2
10:35 a.m.	IGA	Rideau St. Lawrence Kings	4	Northumberland Nighthawks	1
11:45 a.m.	IGA	Windsor Jr. Spitfires	0	Oshawa Minor Generals	1
3:15 p.m.	IGA	Oshawa Minor Generals	0	Burlington Eagles Gold	3
4:25 p.m.	IGA	Seaway Valley Rapids	1	Rideau St. Lawrence Kings	0
7:15 p.m.	PGHA	Windsor Jr. Spitfires	1	Peterborough Petes	3
8:25 p.m.	PGHA	Clarington Toros	2	Northumberland Nighthawks	2
Sunday, September 17, 2017					
11:10 a.m.	ADM	Peterborough Petes	0	Rideau St. Lawrence Kings	3
11:25 a.m.	IGA	Northumberland Nighthawks	4	Burlington Eagles Gold	2
2:55 p.m.	IGA	Northumberland Nighthawks	1	Rideau St. Lawrence Kings	2

Table 2. Number of Teams Playing Friday Games but Not Playing on Sunday

Division	Alliance	GTHL	Association		Grand Total
			NOHA	OMHA	
Tyke	4			20	24
Novice	27		6	165	198
Minor Atom	72	41	7	117	237
Atom	80	54	10	212	356
Minor Peewee	55	65	3	141	264
Peewee	43	53	13	244	353
Minor Bantam	67	57	5	123	252
Bantam	68	75	13	186	342
Minor Midget	52	68	2	105	227
Midget	34	62	14	147	257
Grand Total	502	475	73	1,460	2,510

Table 3. Number of Players from Teams Playing on Friday and Not Playing on Sunday

Division	Alliance	Association			Grand Total
		GTHL	NOHA	OMHA	
Tyke	68			340	408
Novice	459		102	2,805	3,366
Minor Atom	1,224	697	119	1,989	4,029
Atom	1,360	918	170	3,604	6,052
Minor Peewee	935	1,105	51	2,397	4,488
Peewee	731	901	221	4,148	6,001
Minor Bantam	1,139	969	85	2,091	4,284
Bantam	1,156	1,275	221	3,162	5,814
Minor Midget	884	1,156	34	1,785	3,859
Midget	578	1,054	238	2,499	4,369
Grand Total	8,534	8,075	1,241	24,820	42,670

Discussion

The purpose of the current investigation was twofold: (i) to explore the extent to which participation in elite youth hockey in Ontario results in *avoidable* absences from traditional (e.g., public) school contexts; and (ii) to present an alternative and innovative way elite youth hockey tournaments can be scheduled to minimize *avoidable* absenteeism. Armed with this increased understanding, the researchers hoped to present an innovative way that youth hockey tournaments could be scheduled to minimize school absenteeism. Specifically, the innovative idea to move traditional Friday–Sunday tournament schedules to a Saturday–Monday format was supported by our data. Such innovations, where data is a catalyst for strategic change, have been previously noted. For example, Gunther et al. (2017) note that data can be used by organizations to “innovate their business models” and “develop whole new value propositions, target different customers, or interact with customers in different ways” (p. 197).

Coakley (2011) suggests that participants derive ancillary benefits from engagement in sport. This thinking—sport as a catalyst for supplementary development—has been linked to many areas, including scholastic performance. Indeed, the benefits of youth sport participation contributing to children excelling in the classroom is evident (Brown, 2016; Coakley, 2017; Fraser-Thomas et al., 2005; Guest & Schneider, 2003; Lipscomb, 2007; Marsh & Kleitman, 2003; Schultz, 2017; True Sport, 2016; Troutman & Dufur, 2007). In the context of the current investigation, the researchers found no reason to contradict these prior findings

and support Coakley's (2011) positioning of sport, including its contribution to classroom performance. However, part of the youth rep hockey experience is the occurrence of "weekend" tournaments (Wigfield & Chard, 2018). Based on the traditional operations of these tournaments (i.e., Friday–Sunday scheduling), involvement necessitates time away from the classroom to compete, often avoidably. It is these *avoidable absences* that we argue are divergent to sport supporting children to excel in the classroom. Indeed, considering the 104 tournaments forming the sample of the current investigation, the equivalent of 219.9 years of school were missed unnecessarily.

Stanca (2006) noted that absenteeism can influence student success in the classroom. This supports other scholars (i.e., Epstein & Sheldon, 2002) who assert that increased absenteeism is detrimental to students' learning potential. It is our contention that *avoidable absenteeism* is an area CSO managers can address. To be clear, canceling tournaments to avoid missed school is incongruent to the sporting context and not a recommendation by the researchers. Similarly, mandating that tournaments be played in a 48-hour period is both impractical and imprudent; the logistics of such a condensed schedule would alter the size (i.e., necessary team reductions or division restrictions), delivery (i.e., shortened game times), and safety (i.e., exposure to injury) of these events. Furthermore, considering the importance of tournaments to host CSOs—many are revenue-producing vehicles for youth sport organizations—limiting their size or altering their delivery could damage the financial stability of some host clubs (Wigfield & Chard, 2018). Negative financial impacts of limiting tournament size would further be felt within the communities that consider these events drivers of economic development through sport tourism (Kaplanidou & Gibson, 2012; Kaplanidou & Vogt, 2007). Thus, we do not entertain these as options for the current challenge; however, restructuring tournament schedules to minimize avoidable school absences seems to be a viable concept. Given that presence in the classroom offers students the greatest opportunity to stay current with course materials and learnings (Epstein & Sheldon, 2002), one might reason that tournament schedules that allow the most participants the greatest opportunity to fulfill scholarly obligations, while simultaneously enjoying sporting experiences, would be the best scenario. To accomplish such an objective, a shift in the mindset regarding the current delivery of CSO-run ice hockey tournaments would need to occur; therefore, this is where our attention now turns.

Newell and Swan (1995) long ago challenged CSO managers to be innovative in their thinking and resist the urge to be complacent. Indeed, management literature has identified innovation as an integral executive competency that contributes to organizational effectiveness (Damanpour & Schneider, 2006; Wolfe, 1994). Scholars, however, have noted a reluctance to change in tradition-bounded

industries such as sport (Hoerber & Hoerber, 2012; Wolfe et al., 2007), where a reliance on convention is apparent (Taylor, 2004; Thiel & Mayer, 2009). Positioning all CSO leaders as static, though, is not accurate; indeed, Hoerber et al. (2015) found that some “CSOs are actively involved in the pursuit of innovations” (p. 529). Indeed, utilization of data—as a resource for organizations (Abbasi, Sarker, & Chiang, 2016)—to aid decision-making and drive innovation in sport is important. Fried and Mumcu (2017) posit that sport leaders should use data to “more appropriately manage their organizations” (p. 2). We would argue that innovative practices around tournament scheduling would align with this “appropriate management.” This could further translate to the wider sport ecosystem where athletes’ holistic experiences are primary considerations; indeed, limiting avoidable school absences should be a goal of all sport experience providers.

Hoerber et al.’s (2015) study could be instructive with respect to CSO managers’ appetite for innovative practices; here, “a general focus on process related, administrative, and incremental innovations” (p. 529) was noted. Further, the innovations sought by CSO leaders interviewed were “relatively small changes that address sport program delivery” (p. 529); changing tournament operating days to reduce the significant number of avoidable school days missed by tournament participants seems to qualify. Changing tournament days would also seem to meet the criteria of an innovation addressing “sport program delivery.” The major question to ask is: what constitutes a “relatively small change?” On one hand, moving games back one day (to a Saturday–Monday schedule) would seem to be quite innocuous; however, given the proposed change would contravene the longstanding traditional model of tournament operations, some would argue that such an innovation is anything but small. Indeed, hotel operators may see such a change as detrimental to their business; capturing tournament attendees for Friday and Saturday while freeing Sunday occupancies for the business travelers seems to work, intuitively. Further, culturally, Fridays may be a more palatable day for employees to miss work; to be sure, through the introduction of “casual Fridays,” the office has become less rigid and more fun on this final week day (Reed, 2015). While neither case impacts the number of school days missed specifically, additional stakeholders in the tournament space may not be so keen to change from the longstanding model of tournament delivery that is currently employed.

Conclusion, Future Research, and Limitations

The purpose of the current investigation was twofold: (i) to explore the extent to which participation in elite youth hockey in Ontario results in *avoidable* absences from traditional (e.g., public) school contexts; and (ii) present an alternative and innovative way elite youth hockey tournaments can be scheduled to minimize *avoidable* absenteeism. With approximately 42,670 school days being missed

unnecessarily because of participation in youth rep hockey tournaments, among the current sample of 104 events in the 2017–2018 hockey season, it is evident that a discussion on innovation in tournament scheduling is justified. To be sure, with myriad other tournaments not included in the sample (i.e., the OHF sanctioned 200 additional tournaments in 2017–2018; girls’ rep hockey was beyond the scope of our analysis as were boys’ and girls’ House League tournaments), the amount of avoidable school days missed per annum is significant. As such, the idea to move traditional Friday–Sunday tournament schedules to a Saturday–Monday schedule was proposed. To be clear, we are not advocating for tournaments to cease operations, nor are we in support of a reduction in the number of teams and/or divisional offerings; emphatically, we are not in support of condensed weekend-only tournament formats. We are cognizant of the balance between elite youth sport participation and academic development; indeed, we are supporters of both. What we suggest, based on the results of the empirical findings, is an abundance of *avoidable* school days are missed each year because of traditional tournament schedules. We ascribe to the viewpoint of authors who promote the use of data to aid decision-making (i.e., Davenport, 2006; Janssen, van der Voort, & Wahyudi, 2017) and stimulate innovation (van den Broek & van Veenstra, 2015). Specifically, it is our contention that using data for informed decision-making is essential for sport practitioners. Indeed, intelligent action focuses “on how you derive value from data to make evidenced-based decisions” (Fried & Mumcu, 2017, p. 2). In this regard, “data-driven decision making is now the gold standard for accomplished leaders” (Andrews, Pedersen, & McEvoy, 2011, p. 1). We would challenge CSO leaders to aim for this gold standard and use the current information to shape discussion around innovative practices for tournament delivery.

Future research should consider girls’ rep hockey in Ontario, Canada, to understand if comparable avoidable school absences exist. Further, House League tournaments should be similarly examined to see if this phenomenon is simply a rep sport issue, or if the concern is part of a broader matter. Studies examining other regions in Canada and the United States to better understand if regional differences exist would be beneficial, as would research on other sports. Lastly, analysis of the parental perspective—the social and economic effects of missing work to accommodate youth sport tournament schedules—would be worthwhile.

In closing, we acknowledge that our study is not without limitations. First, it is important to recognize that it is impossible to know the specific travel times for each individual team and/or player who was captured in the data. Further, we do not know with certainty exactly how many players a team had on its roster (i.e., injuries and suspensions may reduce the number of players attending a tournament). Thus, what is presented here is a snapshot of the *potential* school days

missed as a result of traditional Friday–Sunday tournament scheduling. Second, tournament schedules and results analyzed comprise 104 of the 304 sanctioned boys’ rep tournaments within the OHF alone. Thus, this study presents a small suggestion of the avoidable school days missed by young hockey players because of traditional Friday–Sunday tournament scheduling. Incorporating girls’ rep tournaments, and less competitive levels of boys’/girls’ hockey (i.e., house league) tournament schedules from across all Canadian governing bodies would provide the most holistic depiction of this issue. Finally, tournament schedules/results were collected from the websites of host organizations or third-party operators (i.e., Point Streak); therefore, the research team was reliant on these operators for accurate information.

Overall, the research team strongly believes in the value that tournaments provide to youth rep hockey players and their sport experience; however, much can be learned from the current investigation. Specifically, we hope that the findings presented here begin a discussion that could lead to a new way of organizing tournaments to reduce the avoidable absences resulting from traditional tournament scheduling.

References

- Abbasi, A., Sarker, S., & Chiang, R. H. (2016). Big data research in information systems: Toward an inclusive research agenda. *Journal of the Association for Information Systems*, 17(2), 1. <https://doi.org/10.17705/1jais.00423>
- Andrews, D. P. S., Pedersen, P. M., & McEvoy, C. D. (2011). *Research methods and design in sport management*. Champaign, IL: Human Kinetics.
- Bailey, R. (2006). Physical education and sport in schools: A review of benefits and outcomes. *Journal of School Health*, 7(6), 397–401. <https://doi.org/10.1111/j.1746-1561.2006.00132.x>
- Brown, S. (2016). Learning to be a ‘goody-goody’: Ethics and performativity in high school elite athlete programmes. *International Review for the Sociology of Sport*, 51(8), 957–974. <https://doi.org/10.1177/1012690215571145>
- Campbell, K. (2017, March 27). Hockey Canada makes game-changing decision with cross-ice hockey for youth players. Retrieved from <https://thehockeynews.com/news/article/hockey-canada-makes-game-changing-decision-with-cross-ice-hockey-for-youth-players>
- Campbell, K., & Parcels, J. (2013). *Selling the dream: How hockey parents and their kids are paying the price for our national obsession*. Toronto, ON: Penguin Group.
- Caza, A. (2000). Context receptivity: Innovation in an amateur sport organization. *Journal of Sport Management*, 14, 227–242. <https://doi.org/10.1123/jsm.14.3.227>
- Chard, C., Edwards, J., & Potwarka, L. (2015). Understanding the perceived attributes and consequences of participation in youth “rep” hockey. *Journal of Applied Sport Management*, 7(2).
- Charitou, C. D., & Markides, C. C. (2003). Responses to disruptive strategic innovation. *MIT Sloan Management Review*, 44(2), 55–63A.
- Christensen, C. M., Raynor, M. E., & McDonald, R. (2015). What is disruptive innovation? *Harvard Business Review*, 93(12), 44–53.

- Coakley, J. (2017). *Sports in society: Issues and controversies* (12th ed.). New York, NY: McGraw-Hill Education.
- Coakley, J. (2011). Youth sports: What counts as “positive development?”. *Journal of Sport and Social Issues*, 35(3), 306–324. <https://doi.org/10.1177/0193723511417311>
- Côté, J., & Fraser-Thomas, J. (2007). Youth involvement in sport. In P. R. E. Crocker (Ed.), *Introduction to sport psychology: A Canadian perspective* (pp. 270–298). Toronto, ON: Pearson.
- Damanpour, F. (1996). Organizational complexity and innovation: Developing and testing multiple contingency models. *Management Science*, 42(5), 693–716. <https://doi.org/10.1287/mnsc.42.5.693>
- Damanpour, F., & Schneider, M. (2006). Phases of the adoption of innovation in organizations: Effects of environment, organization and top managers. *British Journal of Management*, 17(3), 215–236. <https://doi.org/10.1111/j.1467-8551.2006.00498.x>
- Davenport, T. H. (2006). Competing on analytics. *Harvard Business Review*, 84(1), 98–107.
- Doherty, A. (2005). *A profile of community sport volunteers*. Toronto, ON: Parks and Recreation Ontario. Retrieved from http://wm.p80.ca/Org/Org185/Images/Resource%20Documents/Volunteer%20Resources/Phase1_finalReport.pdf
- Epstein, J. L., & Sheldon, S. B. (2002). Present and accounted for: Improving student attendance through family and community involvement. *The Journal of Educational Research*, 95(5), 308–318. <https://doi.org/10.1080/00220670209596604>
- Findlay, L. C., & Coplan, R. J. (2008). Come out and play: Shyness in children and benefits of organized sports participation. *Canadian Journal of Behavioural Science*, 40, 153–161. <http://dx.doi.org/10.1037/0008-400X.40.3.153>
- Fraser-Thomas, J., Côté, J., & Deakin, J. (2008). Understanding dropout and prolonged engagement in adolescent competitive sport. *Psychology of Sport and Exercise*, 9(5), 645–662. <https://doi.org/10.1016/j.psychsport.2007.08.003>
- Fraser-Thomas, J. L., Côté, J., & Deakin, J. (2005). Youth sport programs: An avenue to foster positive youth development. *Physical Education & Sport Pedagogy*, 10(1), 19–40. <https://doi.org/10.1080/1740898042000334890>
- Fried, G., & Mumcu, C. (Eds.). (2017). *Sport analytics: A data-driven approach to sport business and management*. New York, NY: Routledge.
- Greater Toronto Hockey League. (2017). Tournaments. Retrieved from <http://www.gthlcanada.com/tournaments>
- Green, B. C. (1997). Action research in youth soccer: Assessing the acceptability of an alternative program. *Journal of Sport Management*, 11(1), 29–44. <https://doi.org/10.1123/jsm.11.1.29>
- Green, B. C., & Chalip, L. (1998). Antecedents and consequences of parental purchase decision involvement in youth sport. *Leisure Sciences*, 20(2), 95–109. <https://doi.org/10.1080/01490409809512268>
- Guest, A., & Schneider, B. (2003). Adolescents’ extracurricular participation in context: The mediating effects of schools, communities, and identity. *Sociology of Education*, 76(2), 89–109. <https://doi.org/10.2307/3090271>
- Hoerber, L., Doherty, A., Hoerber, O., & Wolfe, R. (2015). The nature of innovation in community sport organizations. *European Sport Management Quarterly*, 15(5), 518–534.
- Hoerber, L., & Hoerber, O. (2012). Determinants of an innovation process: A case study of technological innovation in a community sport organization. *Journal of Sport Management*, 26, 213–223. <https://doi.org/10.1080/16184742.2015.1085070>
- Hockey Canada. (2017). 2016-17 annual report. Retrieved from <https://cdn.hockeycanada.ca/hockey-canada/Corporate/About/Downloads/2016-17-annual-report-e.pdf>

- Hull, C. E., & Lio, B. H. (2006). Innovation in non-profit and for-profit organizations: Visionary, strategic, and financial considerations. *Journal of Change Management*, 6(1), 53–65. <https://doi.org/10.1080/14697010500523418>
- Hyman, M. (2009). *Until it hurts: America's obsession with youth sports and how it harms our kids*. Boston, MA: Beacon Press.
- Janssen, M., van der Voort, H., & Wahyudi, A. (2017). Factors influencing big data decision-making quality. *Journal of Business Research*, 70, 338–345. <https://doi.org/10.1016/j.jbusres.2016.08.007>
- Kaplanidou, K., & Gibson, H. (2012). Differences between first time and repeat spectator tourists of a youth soccer event: Intentions and image approaches. *Current Issues in Tourism*, 15(5), 477–487. <https://doi.org/10.1080/13683500.2011.607924>
- Kaplanidou, K., & Vogt, C. (2007). The interrelationship between sport event and destination image and sport tourists' behaviours. *Journal of Sport & Tourism*, 12(3-4), 183–206. <https://doi.org/10.1080/14775080701736932>
- Kitsantas, A., Steen, S., & Huie, F. (2017). The role of self-regulated strategies and goal orientation in predicting achievement of elementary school children. *International Electronic Journal of Elementary Education*, 2(1), 65–81.
- Lesyk, J. J., & Kornspan, A. S. (2000). Coaches' expectations and beliefs regarding benefits of youth sport participation. *Perceptual and Motor Skills*, 90(2), 399–402. <https://doi.org/10.2466/pms.2000.90.2.399>
- Lipscomb, S. (2007). Secondary school extracurricular involvement and academic achievement: A fixed effects approach. *Economics of Education Review*, 26(4), 463–472. <https://doi.org/10.1016/j.econedurev.2006.02.006>
- Marsh, H. W., & Kleitman, S. (2003). School athletic participation: Mostly gain with little pain. *Journal of Sport and Exercise Psychology*, 25, 205–228. <https://doi.org/10.1123/jsep.25.2.205>
- Mason, D. S., & Duquette, G. H. (2008). Exploring the relationship between local hockey franchises and tourism development. *Tourism Management*, 29(6), 1157–1165. <https://doi.org/10.1016/j.tourman.2008.02.017>
- Mason, D. S., & Foster, W. M. (2007). Putting Moneyball on ice? *International Journal of Sport Finance*, 2(4), 206–213.
- Minor Hockey Alliance of Ontario. (2017). *Tournament listings*. Retrieved from <https://alliance-hockey.com/Tournament-Listings>
- Newell, S., & Swan, J. (1995). The diffusion of innovations in sport organizations: An evaluative framework. *Journal of Sport Management*, 9(3), 317–337. <https://doi.org/10.1123/jism.9.3.317>
- Northern Ontario Hockey Association. (2017). Tournament search. Retrieved from <https://c2j.agilex.ca/NOHA/NOHAPortal/page/tournamentsearch.aspx>
- Ontario Ministry of Education (2017). School year calendar. Retrieved from <http://www.edu.gov.on.ca/eng/general/list/calendar/holidaye.htm>
- Ontario Minor Hockey Association. (2017). Tournament listings. Retrieved from <https://www.omha.net/page/show/1509684-tournament-listings>
- Patrick, H., Ryan, A. M., & Kaplan, A. (2007). Early adolescents' perceptions of the classroom social environment, motivational beliefs, and engagement. *Journal of Educational Psychology*, 99(1), 83–98. <https://doi.org/10.1037/0022-0663.99.1.83>
- Pegoraro, A. (2014). Twitter as disruptive innovation in sport communication. *Communication & Sport*, 2(2), 132–137. <https://doi.org/10.1177/2167479514527432>
- Reed, C. (2015). Disrupting and reimagining the workplace through casual Fridays. *New Errands: The Undergraduate Journal of American Studies*, 2(2).

- Schultz, K. (2017). Do high school athletes get better grades during the off-season? *Journal of Sports Economics*, 18(2), 182–208. <https://doi.org/10.1177/1527002514566279>
- Stanca, L. (2006). The effects of attendance on academic performance: Panel data evidence for introductory microeconomics. *The Journal of Economic Education*, 37(3), 251–266. <https://doi.org/10.3200/JECE.37.3.251-266>
- Taliaferro, L. A., Rienzo, B. A., & Donovan, K. A. (2010). Relationships between youth sport participation and selected health risk behaviors from 1999 to 2007. *Journal of School Health*, 80, 399–410. <https://doi.org/10.1111/j.1746-1561.2010.00520.x>
- Taylor, P. (2004). Driving up sport participation: Sport and volunteering. In Sport England (Ed.), *Driving up participation: The challenge for sport* (pp. 103–110). London, UK: Sport England.
- Thiel, A., & Mayer, J. (2009). Characteristics of voluntary sports clubs management: A sociological perspective. *European Sport Management Quarterly*, 9(1), 81–98. <https://doi.org/10.1080/16184740802461744>
- Torres, C. R., & Hager, P. F. (2007). De-emphasizing competition in organized youth sport: Misdirected reforms and misled children. *Journal of the Philosophy of Sport*, 34, 194–210. <https://doi.org/10.1080/00948705.2007.9714721>
- Troutman, K. P., & Dufur, M. J. (2007). From high school jocks to college grads: Assessing the long-term effects of high school sport participation on females' educational attainment. *Youth & Society*, 38(4), 443–462. <https://doi.org/10.1177/0044118X06290651>
- True Sport. (2016). What sport can do: The true sport report. Retrieved from <https://truesportpur.ca/sites/default/files/content/docs/pdf/tsreportenwebdownload1.pdf>
- Trussell, D. E., & Shaw, S. M. (2012). Organized youth sport and parenting in public and private spaces. *Leisure Sciences*, 34(5), 377–394. <https://doi.org/10.1080/01490400.2012.714699>
- van den Broek, T. A., & van Veenstra, A. F. (2015, May). Modes of governance in inter-organizational data collaborations. In *ECIS 2015*. Retrieved from https://aisel.aisnet.org/ecis2015_cr/188/?utm_source=aisel.aisnet.org%2Fecis2015_cr%2F188&utm_medium=PDF&utm_campaign=PDFCoverPages
- Vanreusel, B., Renson, R., Beunen, G., Claessens, A. L., Lefèvre, J., Lysens, R., & Eynde, B. V. (1997). A longitudinal study of youth sport participation and adherence to sport in adulthood. *International Review for the Sociology of Sport*, 32(4), 373–387. <https://doi.org/10.1177/101269097032004003>
- Wigfield, D., & Chard, C. (2018). Understanding brand associations of preferred minor hockey tournaments from the parents' perspective. *Event Management*, 22, 183–198. <https://doi.org/10.3727/152599518X15173355843343>
- Wolfe, R. A. (1994). Organizational innovation: Review, critique and suggested research directions. *Journal of Management Studies*, 31(3), 405–431. <https://doi.org/10.1111/j.1467-6486.1994.tb00624.x>
- Wolfe, R., Babiak, K., Cameron, K., Quinn, R. E., Smart, D. L., Terborg, J. R., & Wright, P. M. (2007). Moneyball: A business perspective. *International Journal of Sport Finance*, 2(4), 249–262.
- Wolfe, R., Wright, P. M., & Smart, D. L. (2006). Radical HRM innovation and competitive advantage: The Moneyball story. *Human Resource Management*, 45(1), 111–145. <https://doi.org/10.1002/hrm.20100>
- Zaltman, G., Duncan, R., & Holbek, J. (1973). *Innovations and organizations*. New York, NY: John Wiley & Sons.

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