Leveraging Sports Events to Increase Social Capital

and Foster a Sense of Community

by

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A Dissertation Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

Approved February 2024
by the Graduate Supervisory Committee:

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ARIZONA STATE UNIVERSITY

May 2024

ABSTRACT

Sports facilities are constructed across the United States using public subsidies and there is limited research about how the community benefits from these investments. Broader community benefits need to be established to justify public funding of sports facilities, including how social capital and sense of community are developed in a sport context. This research was composed of three studies that explored the benefit of providing access to sports events as a generator of social capital, the importance of developing social spaces at sports facilities to provide opportunities for attendees to nurture a sense of community and the value of virtual spaces in maintaining sense of community when isolated. The first study was a case study of Arizona State University (ASU) football season ticket holders to understand whether ticket donations to games can facilitate social capital by providing fans an opportunity to meet new people and develop long-term relationships. Findings indicated that donating tickets to sports events facilitate social relationships among fans that can build social capital, which advances existing research that focused primarily on the economic impact, and provides practical applications by encouraging sport managers to donate unused tickets. The second study examined sense of community by evaluating how fans use social spaces at a Denver Broncos National Football League (NFL) game and the Ironman World Championships (IWC). This study demonstrated that sense of community can originate in social spaces because attending a sport event and interacting in social spaces facilitates positive feelings about the community for the attendees. The third study focused on the impact of the COVID-19 pandemic on sport participants' sense of community. This study examined the impact the pandemic had on sense of community among members of USA Triathlon,

the Olympic and Paralympic National Governing Body for the sport in the United States. The research showed that USA Triathlon members adopted alternative virtual engagement opportunities that replaced in-person activities and were not materially impacted by the pandemic. Overall, these three studies advanced the understanding of how sports events, whether in-person or virtual, can facilitate social capital and enhance sense of community.

ACKNOWLEDGEMENTS

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER 1: INTRODUCTION

Rationale

The sport industry is one of the world's most captivating and lucrative sectors and is growing in popularity and revenue (Schneider, 2022; Gough, 2023). Communities across America invest in sports at all levels from grassroots to major professional sports organizations. The most obvious display of those investments are sports facilities that are typically built using public subsidies. Even with these massive public contributions, there is limited research about how the community benefits from these investments; instead, existing research primarily focuses on the economic impact despite evidence that economic benefits may be lacking (Baade et al., 2011; Crompton, 1995; Humphreys, 2019; Siegfried & Zimbalist, 2006). Sports events provide opportunities for social interactions that have the potential to serve as generators of social capital and lead to an enhanced sense of community for spectators and participants. Thus, examining the social benefit of sports events is a relevant area of study.

Robert Putnam's work on social capital provides the initial basis for these studies. Putnam used bowling as an example to demonstrate the decline in social capital in the United States (2000). Putnam noted that the total number of individual bowlers increased by 10% while league bowling decreased by 40% from 1980-1993; thus, while more people were bowling, they were not bowling together. During that same timeframe, Putnam also identified a decline in voter turnout, church attendance, union memberships, Parent Teacher Association (PTA) participation, women's groups, and volunteerism. Though Putnam's initial study was published in 1995, his work has had substantial impact in the ongoing study of social capital, including research focused on the sports

community (Dyreson, 2001; Fischer, 2005; Harris et al., 2017; Burrmann et al., 2019; Tolika et al., 2022). This study adopted Putnam's definition of social capital, which prioritized the development of reciprocity, social networks and trust between people in garnering social capital (Putnam, 1995).

Sports is a logical place for the development of social capital as sport events provide a place for people to gather around a common cause like a team or sport, and to establish social relationships that can produce and reinforce personal networks or inspire a shared sense of identity as a fan. One potential avenue for increasing social capital is to donate tickets to sporting events to provide opportunities for people who normally would not have the opportunity to attend and interact to connect and establish new relationships. The commonality generated by attending an event and cheering for a common outcome, or even enjoying a common sport, provides a natural way for people to connect who might otherwise be strangers, and accentuates similarities among groups that otherwise may be at odds (Chalip, 2006; Seippel, 2006; Legg et al., 2018). Existing research supports the possibility that sport events can be social anchors that facilitate social interactions that lead to the development of social capital (Clopton & Finch, 2011b; Oja, et al., 2018). Social capital focuses on increasing social interactions to enhance trust throughout a community, which produces benefits at both the individual and aggregate level (Coleman, 1988; Putnam, 2000). Attending sports events can connect people from disparate backgrounds who share the commonality of being fans of the same team. These interactions have the potential to foster social capital by bridging social barriers and bringing groups together to form new networks that can increase access to resources in the community.

2

Though sense of community is a different construct than social capital, given the similarities between the two, scholars have suggested that sense of community is a correlate of social capital (Pooley, Cohen, & Pike, 2005). Therefore, social opportunities should be explored further through the study of both social capital and sense of community at sports venues. McMillan and Chavis (1986) defined sense of community as feelings that individuals have of belonging, that they matter to one another, that their needs will be met through their commitment to be together, and that the emotional connection results from sharing similar experiences and common places. Fostering a sense of community at sports facilities is important because it has the potential to enhance the quality of life for attendees as a result of interactions with others (Schwarz, 2009). Warner and Dixon (2011) adapted sense of community to make it more relevant and applicable to the sports industry with sense of community in sport (SCS). Later, Warner, Kerwin and Walker (2013) developed a six-factor theoretical model for SCS that included social spaces and determined that "an in-depth analysis of each SCS factor's impact is recommended to fully understand how sense of community influences other outcomes" (pg. 360). Social spaces are defined as common areas where fans interact with one another and foster a sense of community (Warner, Dixon & Chalip, 2012).

Increasing sense of community can be accomplished at a distance through virtual social spaces (Rovai, 2002). The value of social spaces is not restricted to traditional physical settings of sport facilities, so virtual social spaces can be examined to better understand whether sense of community is nurtured for sport participants through increased interactions in a virtual setting. Connecting virtually was the only way for most people to communicate and interact during the pandemic, thus providing a unique

3

opportunity and escalating the importance of exploring this topic. Increasing engagement, including in a virtual environment, allows information and common feelings to be shared, fosters trust and aids in developing a sense of belonging (Lizzo & Liechty, 2020; Blanchard & Markus, 2002; Ridings, Gefen & Arinze, 2002). Schubert and Ginsberg (2000) found that virtual communities exchange experiences and interests, which creates linkage between individuals and groups.

The COVID-19 pandemic made a significant and immediate impact on the sports industry when it resulted in the shutdown of leagues and sports events, including the NCAA basketball tournament, starting in March 2020. The 2020 college football season was met with game postponements and cancellations and the games that were played had no fans or limited fans in the stands depending on the local COVID-19 restrictions. The following season, in 2021, college football had the lowest recorded attendance in 30 years (Dodd, 2022); whereas in 2022 college football attendance had the largest year-over-year increase since 1982 (Dodd, 2023). The same trend was true for participation in USA Triathlon multisport clubs when certified clubs decreased by 16.5% from 2019 to 2021 (C. St. Lucia, personal communication, February 18, 2022) and then increased by 6% in 2022 (T. Lenneberg, personal communication, January 15, 2023). Attendance rebounded in all major American sports in 2022 and the NFL saw its largest increase in the past nineteen seasons (Broughton & Fisher, 2023). Post-pandemic, the sport industry will have to continue to adapt the way they manage and build sport facilities to diversify their offerings due to the variability in attendance because fans have become accustomed to watching and socializing in alternative spaces due to the COVID-19 pandemic and the recent surge in attendance may be a response to the pandemic and not sustainable.

Participants have made significant changes to their sporting habits, so it is important to better understand how virtual social spaces impacted sense of community for participants. The impact of COVID-19 on the sport industry cannot be understated, so it is imperative for sport organizations to create and expand virtual engagement opportunities. Clearly, the pandemic has also elevated the importance of finding places to connect with each other – both in person and virtually – further displaying the importance and timeliness of this research.

Social capital and sense of community are diminishing (Putnam, 2000; Wilson-Doenges, 2000; Gesthuizen et al., 2009; Mannarini & Salvatore, 2019), so it is vital to explore the ways in which it can be enhanced. Research has shown that improving a person's social capital and sense of community is likely to provide many benefits including, but not limited to improved feelings about community (Chavis & Wandersman, 1990; Chalip, 2006; Grieve & Sherry, 2012), increased sense of belonging (McMillan, 1976; McMillan & Chavis, 1986; Warner & Dixon, 2011; Fairley & Tyler, 2012; Warner & Dixon, 2013) and reduced risks of social exclusion (Nielson et al., 2019, Stanley et al., 2012). One opportunity to enhance social capital and sense of community is through sporting events, because they enable social interactions that may be facilitators of social capital and sense of community for both spectators and participants. Sports events have limited economic benefits, while other benefits such as social capital and sense of community need to be explored further.

Summary of Studies

The three studies are intended to advance prior research and provide practical applications to address the need for utilizing sports to generate social capital and sense of community. This dissertation applied a three- -study format with each study focused on leveraging sports to improve the quality of life for community members through the theoretical foundations of social capital and sense of community. Each study built on past research to explore whether sports can be leveraged as a mechanism for facilitating social capital and sense of community by studying fans attending in-person events and participants connecting virtually. The first study examined social capital through spectators in the stands at college football games; the second study evaluated whether social spaces at two vastly different venues – a National Football League game and the Ironman World Championships – facilitated sense of community for attendees; and the third study examined the use of virtual spaces during COVID-19 and their relation to overall sense of community for adult members of a United States Olympic & Paralympic national governing body.

Study 1 Overview

Ticket Donations as Facilitators of Social Capital, explores whether ticket donations to sports events can facilitate the development of social capital by providing fans an opportunity to meet new people, develop long-term relationships and expand their identities. Sport events provide a place for people to gather around a common cause, with the ability to establish social relationships that can connect individuals who would not have met otherwise (Chalip, 2006; Seippel, 2006; Legg, et al., 2018). Sports events can serve as social anchors if access is increased, which leads to more social interactions and

the potential to generate social capital (Clopton & Finch, 2011a; Klinenberg, 2018). Sport events can serve as social anchors that provide social interactions that serve as generators of social capital. These interactions have the potential to bridge social barriers by bringing people together to form new networks providing access to untapped resources in the community. Furthermore, fans unify and share an identity by supporting and cheering for their team together that expands beyond race, ethnicity, or socioeconomics.

Sports events have the potential to create strong ingroup loyalty, trust, and group identity, but can also enhance social exclusion and sectarian divides – a notion referred to as hyperbonding (Clopton & Finch, 2011b). If opportunities for access to sporting events are extended beyond the ingroup that can afford games to the community then there is a potential for outgroup interactions that lead to increased social capital. This is especially important because the trend to commoditize sport may undermine the social benefits, as individuals without the financial means to attend sport events are excluded. The social capital benefit may diminish as the cost of events increases and can lead to increasing solidarity within an ingroup or *hyperbonding* (Oja et al., 2018). Previous research suggested that sport serves to bridge social and economic class (Ohl, 2000) if access is extended to the community who cannot afford to attend games. The implication is that economic and social capital are antagonistic and that there must be a trade-off between profit and the social benefits of spectator sports, namely, the community bonding benefit. Focusing on one tactic for expanding access to spectator sports, unused ticket donation, this study demonstrates that it is possible to utilize sports venues to build social capital without loss of revenue. More research is required to determine if the encounters at sports

events, especially those between individuals from distinct, otherwise separate social spheres, are sufficient to forge bonds that contribute to social capital.

The purpose of this study was to explore whether extending access to sporting events to those who would otherwise not have access provides opportunities for increased interactions that facilitate social capital. This qualitative study investigated the feasibility of implementing programs to increase public access to sports events, such as repurposing unused tickets to provide access to segments of the public for whom the cost of attendance is prohibitive. Using a mixed-method approach, this study examined the possibility of donating tickets to facilitate the development of social capital at Arizona State University (ASU) football games. Findings indicated: 1) attending sports events facilitates social relationships that can build social capital and 2) sustained ticket donations, to the same people over multiple games that include opportunities for social interaction outside of the game increases the likelihood of developing social capital among attendees.

Study 2 Overview

The second article, *Fostering a Sense of Community through Social Spaces at Sports Events*, explored how fans use social spaces at sports events to better understand whether these social spaces nurture a sense of community. Sport facilities have been built using public subsidies and there is limited research about the community benefits derived from these investments. These investments are made without prioritizing broader community benefits, including how sense of community is developed among sports fans and the benefit of developing social spaces at these facilities to provide opportunities for attendees to interact and foster a sense of community.

Sense of community is a perception that individuals have of belonging and that their needs will be met collectively through shared experiences in common places (McMillan & Chavis, 1986). Developing a sense of community at sports events has the potential to improve the quality of life for attendees. Building on McMillan and Chavis' work on sense of community. Warner, Kerwin and Walker (2013) developed a six-factor sport-focused theoretical model that contributes to the sense of the community theory by recommending factors that work in harmony to facilitate sense of community. One of those factors is social spaces – common areas where fans interact with one another with the potential to foster a sense of community (Warner, Dixon & Chalip, 2012).

This research explored social spaces at sports facilities to better understand the meaning fans assign to social spaces and whether sports facilities cultivate a sense of community. Building on Warner et al., (2012), this study examined whether social spaces nurture a sense of community for spectators at the following sports events: a Denver Broncos home football game and the Ironman World Championships. The qualitative research advances the theoretical understanding of social spaces, as contributors to fostering sense of community for sports fans. It does so by expanding on past research that focused primarily on sport participants to now include spectators. The study also demonstrates that attending a sports event and interacting in social spaces facilitates positive feelings about the community for the attendees and can be contributors to fostering a sense of community. In addition to furthering the sport-specific research on this theory, the findings provided practitioners with insight into the importance of developing social spaces at sports facilities, since sense of community can originate in social spaces.

Study 3 Overview

The third study, Sport *Sense of Community in a Virtual Space: COVID-19s Impact on Sport Participants*, explores the impact of virtual spaces on sense of community among sport participants during the pandemic. COVID-19 directly impacted sport participants ability to build a sense of community, so technological advancements and new forms of socialization led to the development of virtual communities (Lizzo & Liechty, 2000). Virtual spaces emerged as important for sport participants who could connect, train and interact in virtual spaces, especially during the COVID-19 pandemic, when most sport facilities were closed. Sports organizations and technology companies leveraged existing technology and created new technology to engage and connect with fans and participants.

Virtual communities have been studied for over 30 years, but there is limited research about leisure-based virtual communities (Lizzo & Liechty, 2020) and even less on the sense of community in virtual spaces for sport participants. According to Witmer et al. (1996) virtual spaces can simulate real world activities and places. This study utilizes the Brief Sense of Community Index (BSCI) and the Sense of Community in Sport (SCS) instrument to explore the impact the pandemic had on sense of community among endurance sport participants, specifically members of USA Triathlon, the Olympic and Paralympic National Governing Body for the sport in the United States.

The purpose of this study was to investigate the impact of COVID-19 on sense of community for triathletes by exploring the impact it had on the sense of community among triathlete participants across time. Certain sports, like triathlon, have advantages over other sports during a pandemic, because it is an individual sport where people can

10

train alone, is a technologically advanced sport where the athletes embrace virtual

training and competitions, and is a sport with affluent participants who have more time

flexibility and resources to train in a virtual environment.

Dissertation Overview

Through these three studies, this dissertation explores social capital and sense of

community in a sport context in both a physical and virtual setting. The first study

examined donating unused tickets to college football games to members of the

community to facilitate social relationships that can build social capital. The study

revealed that donating tickets to the same fans for multiple games and including

opportunities for social interaction outside of the fixed seats increases the likelihood of

developing social capital. Therefore, it is important to identify more spaces for fans to

interact outside of fixed seats. This led to the second study evaluating whether social

spaces at sports events facilitate sense of community for spectators. The second study

helped provide meaning to social spaces at sports events through the experience and

views of attendees advancing both the sense of community theory and showing the value

of social spaces as a facilitator of sense of community. The third study furthered the

research on social spaces by examining the use of virtual spaces to enhance sense of

community for sport participants during COVID-19. The three studies are

complementary to each other, advance prior research and provide practical applications to

the sport industry.

Practical Application in Sport

If the dynamics of how and when sense of community is or is not experienced in a

sport setting becomes more clearly understood, sport managers can use this

knowledge to better build and leverage community in ways that enhance the

image of the region, university, or city, and even more importantly, improve the

quality of life for its community members, including sport participants.

(Warner & Dixon, 2011, pg. 260)

This research increases the understanding of how sports events impact social capital and sense of community in both physical and virtual spaces. It provides sport practitioners with insight into the importance of providing access to sport events to build social capital and developing social spaces at sports facilities and in virtual environments to foster sense of community. Legg et al. (2017) recognized that many sport management professionals are focused on in-game experiences and can neglect other areas where positive outcomes may develop. Fans expect an enhanced experience and are interested in socializing at sporting events, so sport practitioners have been renovating facilities to create social experiences and reduce capacity to address the decrease in attendance (Suneson, 2019).

There are practical applications for all three studies. The first study, *Ticket Donations as Facilitators of Social Capital*, investigates the feasibility of implementing programs to increase access to sports events, such as donating unused tickets to provide access to people who cannot afford to attend on their own. Donating unused tickets increases the opportunity for social capital to be fostered for underrepresented members of the community and it enhances the game day experience for season ticket holders. The findings from this study showed collegiate athletics departments the value in donating tickets to reach new and untapped audiences and communities, filling stadiums with cheering fans, generating short-term revenue through increased parking, concessions and

merchandise purchased, and leading to long-term revenue through potential season ticket sales, donations, sponsorships and broadcast revenue. Based on the findings, when people interact with each other over multiple games they are more likely to develop relationships and build social capital. As such, ticket donations should be given to the same individuals for multiple games and should also incorporate social activities such as tailgating. The second study, *Fostering a Sense of Community through Social Spaces at Sports Events*, demonstrated that social spaces provided the opportunity for sense of community to be cultivated. Sport leaders are encouraged to construct social spaces at sports facilities to create places for members of their community to interact and to grow their fanbase by attracting the younger generation who are more interested in socializing than sitting in fixed seats (Sunnucks, 2019). The third study, Sport *Sense of Community in a Virtual Space: COVID-19s Impact on Sport Participants,* revealed the importance of virtual social spaces for sport participants. Sports organizations and technology companies should leverage existing technology and create new technology to engage and connect with fans and participants virtually. During the pandemic and due to the cancelation of events, participants made significant changes to their sporting habits and immediately converted to adopted online offerings. So, it is imperative for sport organizations to create and expand virtual engagement opportunities. The findings from this study can also be applied to the sports industry by identifying and developing virtual social spaces that enhance fan and participant experiences through increased interactions.

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CHAPTER II:
TICKET DONATIONS AS FACILITATORS OF SOCIAL CAPITAL

Abstract

Sports events can serve as social anchors that enable social interactions that serve as generators of social capital. Increasing costs of attending sports events potentially limits accessibility to these opportunities for social interaction to only certain groups. As a result, the social capital benefits diminish with rising costs of attending events. This exploratory study investigated how ticket donations might impact social interaction and subsequently social capital development. This research can also demonstrate to sport practitioners the benefit of implementing programs to increase public access to sport events, such as repurposing unused tickets to provide access to segments of the public for whom the cost of attendance is prohibitive. This study examined these issues through a case study at Arizona State University (ASU) Football Games. Using a mixed-method approach, a stratified random sample of ASU season ticket holders were sent a questionnaire and structured interviews were conducted among a subset of those who filled out the survey. Findings indicated: 1) attending sports events facilitated social relationships that built social capital and 2) sustained ticket donations, to the same people over multiple games that include opportunities for social interaction outside of the game increased the likelihood of developing social capital.

Keywords: social anchor theory, bonding social capital, bridging social capital, college sports

Ticket Donations as Facilitators of Social Capital

Regardless of reduced participation and changing spectator patterns, the sport industry is growing in popularity and revenue; Out of the 20 most watched U.S. telecasts in 2022 all 20 were sports events (Schneider, 2022) and annual revenues from North American sports exceed $80 billion (Gough, 2023). With the rise of college sport as a business enterprise, there has been an accompanying call to extend research on sport impact beyond economics. College sports are integrated into American universities that have served the needs of society and fostering the public good (Chambers, 2005; Gonzalez & Padilla, 2008; Pruitt et al., 2019; Bell & Lewis, 2023). Research outside of sport, including festivals, museums and performing arts, has recognized the need for an increased emphasis on evaluating social capital in addition to economic impact (Arcodia & Whitford, 2007). Correspondingly, a growing body of literature has begun to examine how to leverage sport for social impact (Chalip, 2006; Lyras & Welty Peachey, 2011; Welty Peachey, 2015; Welty Peachey, et al., 2013; Welty Peachey, et al., 2015). An emerging theme in this research is evidence connecting attendance at sport events with increased social capital (Chalip, 2006; Gibson, et al., 2014; Schulenkorf, 2010). Broadly, social capital represents the concept that social networks have value similar to physical capital or human capital. Social capital is further defined through its form (bridging and bonding) and function (e.g., reciprocity, mobilizing solidarity, generating trust and social links, linking to external assets; Putnam, 2000). Sport appears to be a logical place for the development of social capital as sports events provide a place for people to gather around a common cause, and to establish social in- and out-group relationships that can both produce and reinforce personal networks and connect individuals who might otherwise be

20

strangers (Chalip, 2006; Seippel, 2006; Legg, et al., 2018). Past research has primarily focused on sport participants (Lyons & Dionigi, 2007; Warner & Dixon, 2011; Warner, Dixon & Chalip, 2012; Legg et. al., 2017), but limited research has been conducted on sport spectators, especially as it relates to social spaces.

Research on the impact of sport on social capital tends to support the claim that sport is a connector for people without obvious similarities, but it also reveals circumstances where sport can have a marginal benefit or even hinder social capital. Under certain circumstances, social benefits may be enhanced such as when Oja et al, (2018) examined the impact of the Major League Baseball All-Star game in Kansas City revealed a post-event increase in social capital. There are also circumstances when the benefits to social capital are hindered. Gibson and colleagues (2014) reported slight decreases or no changes across five dimensions of social capital following the 2010 World Cup in South Africa. Lewandowski (2018) also suggested the potential problems of sport and social capital, noting that an urban boxing gym that provided free access to youth, (re)produced "hierarchical patterns of division and segregation" (p. 403), and underutilized sites of sociability to build trust and social capital.

These conflicting results suggest that factors associated with sports events can foster or inhibit potential social benefits. Further, the trend to commoditize sport may undermine the social benefits, as individuals without the financial means to attend sport events are excluded. These rising costs are evidenced in collegiate American football. Ticket prices to major college football games have risen substantially in the past 25 years and now represent 25-30% of the total income generated by athletic departments (Howard & Crompton, 2004; Morehead, et al., 2017). However, this rise in ticket prices

does not appear to be a simple response to demand exceeding supply. Markedly, though revenue has increased, attendance at Division I football games decreased from 2011-2015 (Fulks, 2017). At its extreme, Oja et al. (2018) warn that this type of exclusivity can lead to *hyperbonding*, promoting solidarity within an ingroup. Hyperbonding is another factor that can lead to reduced social capital with decreased opportunities for interactions across diverse groups contributing to reduced social capital. Though previous research often suggests that sport serves to bridge social and economic class (Ohl, 2000), this community is often restricted to only individuals who can afford to attend games. Ticket donations allows for bridging and therefore has the potential to increase social capital. More research is required to determine if the ephemeral nature of encounters at sports events, especially those between individuals from distinct, otherwise separate social spheres, are sufficient to forge bonds that contribute to social capital.

Public sporting events can serve as social anchors that provide opportunities for social interactions that in turn, serve as generators of social capital (Clopton & Finch, 2011b), but only if people have access (Klinenberg, 2018). Athletics departments can provide that access by donating unused football tickets to individuals from underrepresented communities. Unused ticket donations could increase the diversity of attendees across a range of factors, leading to increased social interaction, the formation of heterogeneous networks, and potentially enhance social capital. Sport managers, however, may be reluctant to give away tickets for fear of reducing the perceived value of tickets and negatively impacting their revenue (Courty, 2003; Drayer, et al., 2012).

Besides increasing social capital, donating unused tickets could also benefit the athletics departments by reaching new and untapped audiences and communities, filling

22

stadiums with cheering fans, generating incremental short-term revenue through increased parking, concessions and merchandise purchased and leading to long-term revenue through potential season ticket sales, donations, sponsorships and broadcast revenue. Providing access to athletics facilities on college campuses also advances an important university objective of showing value to the local community. Universities continue to focus on teaching students and conducting research, but academia is also determined to increase their local embeddedness, because "universities have been regarded as detached from the community" (Chatterton, 2000, p. 166). In addition, developing access for community members, fans, alumni, teachers, staff and students can provide opportunities for university supporters and advocates to connect with community members who otherwise have no direct connection to the university.

Focusing on one tactic for expanding access to spectator sports, repurposing unused tickets, this study examines the possibility of using sports events to build social capital without negatively impacting the experience for those who pay to attend. Ticket donations could increase event diversity across a range of factors including income, race, ethnicity, and age, and would represent a step in increasing social interaction and social capital through sport. This study will explore how ticket donations might impact social interaction and subsequently social capital development through a case study of football at Arizona State University football games. We explore whether attending college football games can be a means to develop social capital. Next, we examine the attitudes of season ticket holders and the effect of ticket donations on the perceived value of tickets, because sport practitioners may be reluctant to donate tickets if their most loyal customers are unsupportive. As such, this research addresses the following three

23

questions: 1) what are the perceptions of season ticket holders toward ticket donations?; 2) can attendance at college football games facilitate social relationships that lead to social capital?; and 3) what are specific strategies that can leverage repurposing tickets toward the development of social capital?

Theoretical Framework

Social Capital

Social capital can be defined as the concept that investment in interpersonal relationships produces at both the individual and aggregate level (Coleman, 1988; Putnam, 2000). At the individual level, social capital focuses on the benefits of a person's past social ties, insofar as these can connect them to other people or resources and afford them favors and social support. At the community level, social capital refers to the degree to which people in the community invest in public goods and benefits. Social capital in sport includes both types of social capital and benefits conceptually from elements from three classic social capital theorists: Bourdieu, Coleman, and Putnam, although the work of Putnam is most relevant to the present study. Putnam explicitly focused on the community level and the role of social structures in providing a space for informal interactions, which precipitate social capital (Clopton & Finch, 2011a; Putnam, 2000). In addition, Putnam was the first to distinguish between bridging and bonding social capital – a central concept that is relevant to this study.

Attendees at sports events share a collective experience that creates a shared ownership among citizens who may not interact without access and places to interact even though they live within the same geographic proximity. The collective experience

creates emotional ownership of a local community's home sports team and a shared

connection that bonds people together. Bonding social capital refers to trust and

reciprocity within exclusive networks and relationships with individuals that are a part of

homogeneous groups (Bourdieu, 1997; Glanville & Bienenstock, 2009; Portes, 1998;

Putnam, 2000; Woolcock, 1998). These social networks have strong ties with close

connections. Exclusive "in-groups" have benefits for social support and social cohesion

and make people feel included and accepted. The downside is it can reinforce exclusive

identities and perpetuate privilege, resulting in excluding and isolating outsiders and

causing further social decay. Bonding social capital often creates strong ingroup loyalty,

trust, and group identity, but can also enhance social exclusion and sectarian divides – a

notion referred to as hyperbonding (Clopton & Finch, 2011b). In sport, hyperbonding can

occur when fans bond and exclude opponent fans, although that type of hyperbonding is

usually ephemeral. Hyperbonding can also result as sports events become exclusive

events that outprice a large segment of society which can create a disconnect between

those who can afford tickets and the rest of the community (Howard & Crompton, 2004).

This type of hyperbonding can create a divide where those that attend games have a sense

of separate, privileged fandom that creates a hierarchy. Indeed, though sport events can

unify communities (Misner & Mason, 2006; Sherry, Karg, & O'May, 2011), it is also

clear that sport can create divisions within communities (Smith & Ingham, 2003).

Bridging social capital represents ties between members of heterogeneous groups.

Bridging social capital provides avenues for people from diverse in-groups to exchange

and share information leading to linkages among people with different social identities

(Brewer, 1979). These bridges create wider overlapping networks, and these loose social

networks are outward looking, enhance inclusion and provide access to resources and opportunities. Bridging ties make sectarian fractures less likely as more people become connected and have investments in relationships with members of the outgroup (Rostila, 2011). Putnam (2000) recognized that bridging social capital is more challenging to generate and sustain than bonding social capital because dense networks already exist, and heterogeneous networks have to be forged. Bridging social capital can be thought of as those ties that cross boundaries, integrating different segments of society so that community interests transcends in-group interest. Clopton and Finch (2011) contend that in order for sport to serve as a social anchor in heterogeneous communities, it must promote bridging as well as bonding social capital.

One of the mechanisms Putnam identified for the creation of social capital is the bond that is created between supporters of a local sports team by creating "a commonality which provides both a topic of conversation and a reason to start one between people who are otherwise strangers" (2005, p. 3-4). Sport can also be an ideal medium for heterogeneous members of a community to interact and connect. Attending collegiate football games can bring people together from diverse backgrounds to tailgate, cheer on the home team, celebrate the wins and agonize over the losses. These interactions potentially bridge social barriers by providing a focus to bring unconnected groups together to form new networks creating incremental connections for access to resources in the community.

Chalip (2006) suggested that sport could be used to leverage social impact but that the impact is not automatic and would require intentional facilitation of social interaction enabling sociability among visitors through the creation of ancillary event-

related social events or the facilitation of informal social opportunities. Chalip's article

led to research on social capital focused on sport participants (Burnett, 2006; DeLuca,

2013; Spaaij, 2009; Tonts, 2005; Wang, et al., 2012), sport volunteers (Welty Peachy, et

al, 2015; Welty Peachy, et al., 2013) and sport fans (Heere & James, 2007; Palmer &

Thompson, 2007; Sherry, et al., 2011). Results, however, have not always been positive.

This is in part due to the way that social capital was conceptualized: individual versus

community or bonding versus bridging. For example, Clopton (2008) found that

intercollegiate athletics enhanced sense of community among college students, but team

identification actually had an inverse relation with community level social capital

(Clopton, 2011). That is, as student identification with their university team increased,

their hyperbonding resulted in an overall reduction in social capital. Even when results

did indicate that sport could lead to the development of social capital, they concomitantly

alluded to potential negative impacts such as the development only of bonding social

capital (Burnett, 2006; Wang, et al., 2012) or the reinforcement of social exclusion and

existing hegemony (Fulton, 2011; Tonts, 2005). This contradiction is mostly a function of

lack of specificity regarding type of social capital. The claim is that when spectator sport

provides opportunities for the production of bridging social capital there may be

community benefits.

Social Anchor Theory

Social anchor theory (SAT) brings together the use of social infrastructure and

institutions for establishing unifying identities to build social capital (Oja, et al., 2018).

SAT provides the theoretical mechanism that can describe the role of sport events in the

development of social capital (Clopton & Finch, 2011b). This theory suggests that certain

social institutions within a community can serve as *anchors* to support the development of bridging social capital, provide a point of connection across demographic barriers, and enhance community identity (Clopton & Finch, 2011). Social anchors can take many forms, such as schools, corporations, natural environments, events, and festivals (Godsell, 1997; Wood & Thomas, 2005). Previous research supports the potential of sport events as social anchors (Clopton & Finch, 2011b; Seifried & Clopton, 2013).

Social identity theory describes a social psychological mechanism through which individuals *identify* with social groups as delineated by their culture or context (Stryker and Burke 2000, Stets 2006, Schwartz et al. 2011). Identity goes beyond a mere description of a physical or situational attribute (e.g. dark skin,low relative income). It is an internalization or acceptance of self as a member of a social category. It reflects the individual's recognition that a specific characteristic he or she possess defines his or her role or status in society. Once an individual identifies with a socially relevant category, he or she can learn the role they are expected to play in social interactions. In complex societies identities can have many facets. Dependent on context, different aspects of an individual become salient and different identities are activated. Fandom, in general, or self-identification as a fan of a specific team, expands an individual's identity. Along the "fan" identity facet the "ingroup" may consist of others that along other identity dimensions are "out-group" members, providing a bridge or commonality that crosscuts other identity categories. Spectator sports make salient the facet of the individual related to the team they support simultaneous with providing the opportunity for people from different social categories to congregate. SAT contends that in order to be a social anchor an event must create bridging in addition to bonding social capital, and provide a point of

community identification across demographic boundaries. This would require that attendance cannot be homogeneous, but should be inclusive and representative of community. Fandom, associates the sport with the community. Spectator sport provides an opportunity for members of diverse groups to experience shared sentiment and emotional investment in a sports team, thus creating a common identity along with a shared experiences supporting a sports team and creating an opportunity for bonding across categories.

Present Research

Sports events can be social anchors that facilitate social interactions that lead to the development of social capital (Clopton & Finch, 2011b; Oja, et al., 2018). However, results measuring the impact of sport events on social capital are mixed. One possible explanation for these mixed results is that sport events have become increasingly expensive to attend, and therefore may be excluding a large segment of society, thus reducing bridging social capital opportunities and potentially leading to hyperbonding. To combat this, repurposing unused tickets by donating them to individuals and groups that may not otherwise attend the game may provide opportunities for bridging social capital, and thus increase the social impact of the sport event. However, given the business role of sport, and in particular American college football as revenue generators for universities, administrators may refute this approach based on the assumptions that donating tickets may cause the perceived value of paid tickets to decrease. This is an example of the inherent conflict that arises in modern-day collegiate sports, since universities are focused on the public good while athletics departments may be prioritizing economic impact. Using a mixed-method approach, the present study

29

examines the possibility of donating tickets as a means to facilitate the development of social capital. In so doing, we also explore the specific details of ticket donations that would appear more likely to lead toward the development of social capital.

Methods

To address the research questions, we used a case study of ASU's Sun Devil Stadium. The University is a large public university (enrollment greater than 120,000), and is located within an urban area. Athletic teams participate in a "Power Five" conference, meaning teams are at the most competitive level of college sport. The University student body is diverse, with a minority of students (49%) identifying as White. Given its location in a metropolitan region, the market also includes several professional sport teams.

A case study method allows for a comprehensive analysis of an individual case that can be applied more broadly to advance theory and practice (Fidel, 1984). While this study focuses on college football games, it has the potential to be relevant and applied to all ticketed events in the sport industry. Prior to the collection of any data, permission was obtained through both the University Institutional Review Board, and the athletic department. An online questionnaire was sent to a stratified random selected group of ASU season ticket holders and structured interviews were conducted with a subset of the survey participants. Creswell and Plano Clark (2011) assert that mixed methods research produces a greater degree of understanding than if a single approach is adopted and it was evident in this study because the questionnaire and the structured interviews provided unique findings. For this study, mixed methods were valuable because the initial survey provided analytical insights and the interviews made the quantitative results more

understandable and provided a deeper understanding of the respondent experience. Each of the specific methods of data collection is described below.

Questionnaire

An online questionnaire was developed with the support of the athletic department (AD) to meet both the purposes of this study and the objectives of AD (See Appendix A). The questionnaire served two purposes. First, responses provided descriptive data relevant to season ticket holder perceptions of donated tickets. Given the research team's interest in practical application, this step was particularly important in ascertaining buy-in from the AD for potential future implementation of a donated ticket program. Second, the questionnaire was used to identify participants for qualitative interviews – which served as the primary instrument for data collection. The lead researcher developed the wording and content of all questions with approval by AD. AD distributed the survey to a sample of season ticket holders. The questionnaire explored the views of season ticket holders related to donating tickets by asking 12 questions. For example, questions asked participants to rate their level of agreement on a 5-point scale with statements such as "Rather than leave seats empty on game day, surplus seats should be given away free to members of the community," and "Surplus tickets should be made available to members of the community at a discounted rate or complimentary". In addition, participants were given a list of possible groups to donate to and asked to select who should be eligible to receive discounted tickets. For AD purposes, questions also addressed preferences for loyalty benefits, impressions of the website, communication preferences, and motivations to donate. The questionnaire was distributed electronically to 547 season tickets holders. Recipients were selected using stratified random sampling

to obtain proportionate representation from individuals within each season ticket pricing tier from $199 to $2,099 (Henderson, et al., 2017). Data were summarized using frequency distributions.

Structured Interviews

Following the questionnaire, 31 season ticket holders participated in a structured phone interview (see Appendix B). Structured interviews were selected for this study over other research formats to increase reliability, maintain consistency and reduce variability of responses by adhering to a standardized list of questions and providing explicit guidelines for categorizing and coding responses (Segal, et al., 2006). Participants were randomly selected from among respondents who indicated in the online questionnaire that they would be willing to participate. The interviews concluded when data saturation was reached (Guest, et al., 2006). The structured phone interviews included a set of carefully prepared questions in a predetermined order, allowing for many of the same advantages as a standard survey (Roller & Lavrakas, 2015). The interview included forced choice questions regarding respondents' views related to donating tickets, and open-ended questions. The forced choice questions were intended to prompt the respondent's opinions related to the primary research questions. While interview questions did not specifically address ticket donations as means to develop social capital, they addressed how social interactions at games would develop social capital, thus providing insights as to how donated tickets may also facilitate social capital. In addition to questions related to views about donating tickets (e.g., Would donating season unused tickets enhance the quality of your game day experience? Why or why not?), questions also sought to explore respondent perceptions regarding whether

attendance at games could facilitate the development of social capital by asking

participants questions about relationships formed at games (e.g., What relationships have

you formed at or surrounding ASU football games? What benefits did you receive from

that relationship (business, friendship, etc.)?).

Data Analysis

Controls were put in place in both the research and analysis phases to address the

role of the primary researcher who has direct experience as a sports practitioner from

influencing the study and analysis. To reduce personal bias, a research assistant was

employed to conduct the structured interviews because sharing personal experiences

reduces the information participants are willing to share (Creswell, 2012). Data analysis

was guided by thematic analysis as outlined by Sparks and Smith (2014). First,

interviews were audio recorded and transcribed verbatim for further analysis. The lead

researcher and research assistant then immersed themselves in the data by reading

through transcripts multiple times prior to developing codes. The two researchers then

independently searched for, identified and labeled themes using a combination of theory-

based and in-vivo codes (Marshall & Rossman, 2011). Theory-based codes were derived

from social capital theory. Researchers also used enumeration – counting the number of

times a particular code occurred. Though enumeration should not be used as a sole

strategy for assessing the relative importance of a code or theme, it can be a useful

supplement to thematic analysis (Henderson, et al., 2017). To enhance the confirmability

of analysis, the lead researcher and research assistant worked through the transcripts line-

by-line to code the data independently (Lincoln & Guba, 1985). The researchers then

discussed the coding to clarify discrepancies. To enhance the credibility of themes, the

researchers strived to provide verbatim quotations that represented multiple voices (Tracy, 2010).

Results

Questionnaire Results

One-hundred sixty-nine people responded to the questionnaire that was distributed by email, representing a response rate of 31%. Respondents were largely male (84%), reported household income well above the state median (59% reported income over $100,000 per year), and highly educated with 81% having graduated from college. The average age of respondents was 54. These demographics are similar to the demographics of the overall season ticket holder population.

Table 1: Gender

Male	84%
Female	16%

Table 2: HH Income

Less than $25,000	3.17%
$25,000 to $34,999	0%
$35,000 to $49,999	7.14%
$50,000 to $74,999	12.70%
$75,000 to $99,999	18.25%
$100,000 to $149,999	26.98%
$150,000 or more	31.75%

Table 3: Education

Grammar school	0%
High school or equivalent	0.78%
Vocational/technical school	1.56%
Some college	16.41%
Bachelor's degree	42.97%

Master's degree	26.56%
Professional degree (MD, JD, etc.)	7.81%
Doctoral degree	3.91%

Results from the questionnaire support the assertion that football season ticket holders prefer to have a full stadium and overwhelmingly approve donating surplus tickets to certain residents (e.g., lower socioeconomic status, military, and children) rather than leaving those seats empty. Frequency distributions indicate that 83% of respondents strongly agree/agree that a stadium filled to capacity enhances their enjoyment. When asked specifically if unused tickets should be donated to members of the community, over 62% of respondents indicated that they strongly agree/agree, while only 7% strongly disagree. The top three groups that season ticket holders supported donating tickets to were as follows: military groups (63%), local nonprofits (41%); and youth teams (36%)

Questions	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I enjoy games at Sun Devil Stadium more when the stadium is filled to capacity	51.54%	31.54%	13.08%	3.08%	0.77%
Surplus tickets should be made available to members of the community at a discounted rate or complimentary	23.08%	38.46%	23.85%	8.46%	6.15%
If there are surplus seats on game day they should be left empty/unused.	4.62%	6.15%	17.69%	44.62%	26.92%
Rather than leave seats empty on game day, surplus seats should be given away free to members of the community?	13.95%	27.13%	29.46%	19.38%	10.08%

Fans who attend the game should be able to upgrade to your seats if you are not able to attend the game?	11.63%	21.71%	22.48%	20.16%	24.03%

In addition to the forced choice questions, the questionnaire also provided an open-ended opportunity for participants to discuss what could improve their experience attending home football games. While the majority of responses focused on specific experiences such as seating, food quality and parking, some of the responses incorporated elements of social capital and inclusion. These responses suggest the importance of creating social interactions that could enhance social capital building. For example, one fan referenced the importance of bonding and networking at games: "Food, networking opportunities, interacting with friends that don't sit near me at half time." Another season ticket holder expressed the importance of filling the stadium in enhancing the game day experience: "A stadium full of committed fans. ASU, win, lose, or draw."

The season ticket holders reinforced this statement in their survey responses and showed the importance of donating unused tickets to ensure a full stadium because it improves their experience. Only four percent responded that they strongly disagree/disagree that a stadium filled to capacity enhances their enjoyment. In addition to season ticket holders preferring a full stadium because it enhances the game day experience, they also want to make sure seats do not go unused. Most ASU football season ticket holders (72.32%) strongly disagree/disagree that surplus tickets should be left empty/unused. Donating unused tickets to members of the community would fill the stadium creating a better game environment while providing opportunities to foster social capital.

Table 4: Season Ticket Holder Responses

Topic	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Full Stadium	0.80%	2.70%	13.50%	31.54%	51.54%
Leave Empty	26.92%	45.40%	16.90%	6.15%	4.60%
Donate	5.30%	8.71%	23.90%	37.10%	25%

Interview Results

Analysis focused on both the potential of donating tickets as a means to facilitate the development of social capital and perceptions of season ticket holders toward donating tickets. As such, findings are discussed below separate to these two topics.

Sport Events as Facilitators of Social Capital

First, findings indicate that ASU football games may serve as social anchors that facilitate the development of social capital through bonding by building stronger relationships among existing groups and through bridging by providing fans an opportunity to meet new people and develop long-term relationships. Further, these relationships are an important part of the fan experience and are supported over long-term exposure and through ancillary events (e.g., tailgating). In order for a sports event to facilitate the development of social capital, relationships must be formed or enhanced through attendance at the sport event, or ancillary events. Though not everyone in our sample indicated that they knew the people who sit near them, several respondents suggested that they had *met new people and formed long-term relationships* as a direct result of attending football games. As Larry[i] stated, "I know everybody around here. I just did tailgates with the people who sit behind me and I didn't know them until the last eight years." Similarly, John noted,

37

A lot of these folks, we are friends now because of [these games]. Just

happen to be sitting in the same section and in the immediate area of the

rows and, over time, we've just basically became what we are

today. Pretty strong tailgate family of about between 20 or 30 or so.

Finally, Craig summed up the importance of games in developing friends,

I didn't know them before or outside of [these games]. It's because we sit

next to each other at football games. In other words, it's not like outside

friends and we all go to the games together. We met because we have

seats together.

Not only do games have the potential to facilitate social relationships, but these

relationships also are an important part of the overall experience. As Noah stated "What

makes a positive game experience? It's when you know the people around you and you

can have a conversation, you can enjoy the environment, you can enjoy the people around

you." Al confirmed the importance of relationships to the fan experience,

But you know, part of the whole thing is sitting next to our friends. We're

high-fiving, we're jumping up and down. Everybody's just getting

excited. We're yelling and screaming and booing on third downs, and stuff

like that. That's part of the experience that we definitely enjoy. So it's

highly rated. Sitting around people we know is very important.

The fan interactions at games also led to economic benefits as Michael stated,

Knowing the people that I met through the ticket group. Getting introduced to all

their people. Yeah, it's a lot of fun. A lot of my kids have even gotten babysitting

gigs from it. Just meeting people, talking to folks.

38

Moreover, Michael explained the benefits of attending games "there's been a lot of professional (benefits) as well as friendships." Stewart also spoke about the social and economic benefits "I think it's friendship, it's finding a group of people that have a common bond, as well as creating business relationships." It is clear that attending games has the potential to facilitate social relationships that lead to social capital. The diversity of the individuals that attend games also came up. Billy mentioned the value in meeting new people when he stated "you meet people from all walks of life."

These *relationships often extended beyond the game to ancillary events*, and several participants discussed the importance of tailgating with friends – either that they came to the game with, or that they met through being a fan. Kevin explained how his group's tailgate grew because of the relationships he formed with people that sit around him,

> *Very significant, very good friendships and relationships. In part of our*
> *tailgate, there used to be about, let's say anywhere from 10 to 15 people,*
> *now there's over at least 50 per tailgate. Our whole section, there's about*
> *50 of us, that all sit together. And just getting to know those around you*
> *that you don't know.*

Fans, like Maddy, who have been going to games for decades value meeting new people displaying bonding and bridging,

> *And I tailgate in an area, I've been there for, you know, close to thirty*
> *years. Those are the same people that have been there. You know, yeah,*
> *you're gonna have some different ones (people), and you meet different*
> *people.*

Similarly, Jackson noted,

> *We've got a pretty group of people that meet for tailgate before the game.*
> *So, I've met some through that. Have met some people sitting close to us*
> *that we have gotten to know better. They also meet with us before and*
> *after the games. A group of friends, based on some people we met.*

These relationships can even extend beyond the on-site experience as Scott explained, "So people will come here. People will come to my house. We'll do the tailgate at my house and, I'm almost a mile away from the stadium, and we'll head over there to watch the game."

Though relationships did develop as a direct result of attending ASU football games, it also appears that those *relationships developed across multiple exposures*. As a result of stadium renovations, several season ticket holders were forced to relocate their seats. A few participants commented that this had made developing relationships more difficult because they were no longer with other season ticket holders. John explained why he struggled to build a relationship with the people who sit around him after his seat relocation, "think having some of those, not fairweather fans, but, you know, single ticket holder fans. Not having a lot of consistency with that." Alex also commented that after two years in his new seats, he had not been able to meet new people even though he is normally someone who makes friends quickly,

> *I've only been in these seats for two years now and I don't know people by*
> *name so much as I know them by face and I get to know people fairly*
> *quickly, but I don't know the people I sit around currently by name.*

Noah echoed similar sentiments, "every game there was somebody different in those seats…it's nice to get to know the people who are sitting around you, because over the years, you come to, get an acquaintance with them." Thus, though attending ASU football games can lead to social relations, those relations often take a longer-term exposure.

Table 5: Facilitators of Social Capital

Sport Events as Facilitators of Social Capital	*Met new people*
	Relationships developed across multiple exposures
	Relationships often extended to ancillary events
	Formed long-term relationships

Reasons for Donating Tickets

In the previous section, we demonstrated how attending games may facilitate social capital. However, given the financial costs of attending games, there is a risk that only *bonding* social capital is formed with individuals from similar socio-economic classes. One way to increase *bridging* social capital could be through donating tickets. Though season tickets holders are in favor of donating tickets, understanding their motivations for doing so helps to shed light on the potential value of donating tickets toward the facilitation of bonding and bridging social capital, and provides practical insight for sport administrators. Based on our analysis, we identified the following three themes as the top reasons why season tickets holders support donating unused tickets: 1) improve game atmosphere; 2) build future fans; 3) community impact.

This study displayed that donating tickets does not decrease the perceived value of tickets for existing season ticket holders and may improve their overall experience; The primary reason that season ticket holders mentioned for being in favor of donating

41

unused tickets was to fill the stadium and *improve the game atmosphere*. Twenty-five

participants mentioned this as a reason to donate tickets. Jason, for example clearly stated

that he was in favor of donating tickets to fill up the stadium, and that it did not reduce

the value of his paid ticket, "Number one would be because we've got to get this stadium

filled for the game day experience. And if that means that some of what I pay invests in

getting that done, I'm actually fine with that." Similarly, Eduardo noted that filling seats

improved his game day experience, "You would have more vibrancy. I believe the

atmosphere, and to fill up the stadium more than if those tickets went unused." Others

pointed out that a fuller stadium meant a better experience for both fans and the team.

According to Cameron, "I want to get a better environment for, not only for the team, but

for the fans. When you see a full stadium in the top, it's a completely different

atmosphere. You know, it really helps the home field advantage". And Chris commented,

simply "I think the environment for the team, having a full venue is much better."

 Participants also frequently mentioned building interest and *creating future fans*

as reasons to donate tickets. Fourteen participants mentioned that donating tickets could

create additional fans. As Arthur stated, "people who are the recipient of a gift might

actually become fans for the first time or become better fans as a result. Steve reflected

on his own experiences attending games as a child when discussing how donating tickets

could help to build fans,

> *I started going to games when I was six years old and it just grew and I*
>
> *kind of like the same thing. You know I take my six year old daughter now.*
>
> *And I would just like to see the next generation grow into kids who*
>
> *wouldn't necessarily get the opportunity to go and may never know what*

the game is even like but if they get the tickets on charity, they would learn

about it and find out and learn that they need to be ASU fans.

Similarly, Will also recalled his own experience as a child and the potential value of donating tickets to build fans,

I think if you get them to the ball park [that] would change

everything. Get them to the game, right? That's gonna slowly (build fans),

hopefully. That's what I did when I was a kid. My Dad took me to a game

and then I was hooked. Hopefully that has the same impact.

It's clear that many fans saw the value of donating tickets as a way of creating additional fans.

In the same vein, other fans recognized that by cultivating interest, individuals who receive donated tickets may become future ticket buyers. John pointed out, "That's it trying to encourage future season ticket holders or even game goers, even if they don't buy season tickets. If they enjoy themselves, they're more than likely to come back again and pay for it in the future." Latonia echoed a similar view, stating simply, "maybe that would generate some interest to be a ticket buyer." Thus, season ticket holders envisioned future economic benefit as well as social benefit to donating tickets.

Finally, multiple participants mentioned the general *community benefit* or goodwill as a reason for donating tickets. Eleven interviewees mentioned this as a reason to donate tickets. David expressed the value in providing tickets to community members who cannot afford to attend on their own "There are lots of people who don't have enough money to go see a game and I think it would be

43

great if they were able to." Gregg stated that he felt donating tickets was a part of the larger mission of a public university. He stated, "Because I think ASU as a public university always should be doing outreach in any manner possible to the general community. So I think it's a great idea." Likewise, Al also commented that he felt like benefiting the community was part of what the university was about,

> *It shows what being a Sun Devil is all about. And, also too, again, if it's going to the right people, like I said, underprivileged that have an appreciation for these things. Again, I think it shows the spirit of what it really means to be an Sun Devil.*

In sum, season ticket holders noted that donated tickets should be used to improve game atmosphere, build future fans, and for community impact. The comments also reveal the value in welcoming and including people with different backgrounds to a common group, bridging conventional divides.

Table 6: Reasons for Donating Tickets

Reasons for Donating Tickets	*Improve game atmosphere*
	Build future fans
	Community impact

Discussion and Implications

This study used an online questionnaire and structured interviews to examine three research questions: 1) what are the perceptions of season ticket holders toward ticket donations?; 2) can donating tickets to ASU football games facilitate social relationships that lead to social capital?; and 3) what are specific strategies that can leverage ticket donations toward the development of social capital? Taken together,

results from both the questionnaire and structured interviews provide general support for implementing ticket donations as a means of building social capital. More importantly, results suggest practical strategies most likely to be effective in bridging social capital.

Questionnaire responses supported the assertion that season ticket holders support donating unused tickets. This runs contrary to the approach many sports managers have taken to restrict secondary ticketing options, including limiting the donations of tickets (Giovanetti, 2013). Season ticket holders in our study preferred tickets be donated, especially to members of the military/veterans, local nonprofits, and children rather than being left unused. The season ticket holder responses suggest that they would not perceive a decrease in the value of their paid ticket when unused seats are donated to charitable groups.

Preferences for child and military related donations are not surprising as over one-quarter of all charitable donations go to education and human services charities (Blackbaud Institute, 2017). Further, scholars have noted an increased convergence between military and civilian discourses in sport, especially in football (Schimmel, 2017). Thus, it would be expected that football season ticket holders would report a preference for donating tickets to military related groups. It is also worth noting that these ticket donations appear unlikely to impact the perceived value of paid tickets. Though intention to purchase in sport is often associated with perceived price fairness (Campbell, 2007; Shapiro, et al., 2016), support for donating tickets suggests that the use of donated tickets does not affect the paid ticket holder's perception of the value of his or her own ticket.

While the practical recommendation here appears obvious and limited (i.e., donate to children and military related groups), it is important to remember that that if the

objective of donating tickets is to facilitate social capital, and in particular bridging social capital, ticket donations should not be limited to these categories, but be inclusive of many forms of diversity such as race, ethnicity, gender, and income. Ticket donations can provide access to diverse members of the community that would not have access otherwise, and there may not be a downside to this approach.

Findings from structured interviews provided additional support to the notion that donating tickets to ASU football games can facilitate social interaction to increase social capital and further provides details into season ticket holder perceptions of reasons for donating tickets. First, it is apparent that fans in this study not only improve their game experience by interacting, but also meet new friends that often turn into long-term relationships. This finding is consistent with previous research that supports the idea that fandom can lead to social relationships that form the basis of social capital (Legg, et al., 2018; Sherry, et al., 2011). However, relationships appear to be restricted to people who can already afford to attend the games rather than bridging social capital – a finding that replicates literature related to social capital and sport participants (Burnett, 2006; Wang et al, 2012). Thus, while attendance at ASU football games may be an effective way to expand access to bridging social capital opportunities for community members, attendance must be diversified to reach that goal.

Salient to this finding is that relationships often developed across time and through tailgating activities. Chalip (2006) was one of the first to suggest that in order to leverage the social benefits of sport, ancillary activities that encourage social interaction outside of the game were also beneficial. Chalip suggested the primary benefit comes when the ancillary event complements the sports event, rather than trying to deliberately

combine two disparate activities like the Olympics and an art festival (2006). Research related to a sport-for-development event in Sri Lanka also indicated the importance of providing event related social opportunities (Shulenkorf & Edwards, 2012). Similarly, previous research illuminates social spaces outside of the competition space as areas to develop a sense of community (Legg, et al., 2017; Warner & Dixon, 2011). Though sense of community is a different construct than social capital, given the similarities between the two, scholars have suggested that sense of community is a correlate of social capital (Pooley, Cohen, & Pike, 2005). Previous research, however, focused largely on sport participants. The present research extends previous research (Gibson, et al., 2002; Drenton, et. al, 2009; Lovett, et al.,2016) by also suggesting that relationships developed across multiple exposures and social spaces outside of competition like tailgating are key areas for generating social capital for fans.

Further, our findings advance the social capital theory in the sport context because the results indicate that new relationships often form from multiple exposures like attending each football game during a season or over multiple seasons. Existing research has largely focused on ongoing programming for participants for sport events that were specifically designed to achieve social outcomes. In contrast, when previous research focused on one-time sport events that were not specifically designed to achieve social benefits, findings tended not to reveal positive benefits (Gibson, et al., 2014). College football games offer a blend between the spectacle of a large-scale event combined with multiple opportunities for exposure. Practically, if ticket donations are to be used as a means of facilitating social capital, it appears that ticket donations should extend to the same individuals for multiple games and should also incorporate social activities such as

tailgating. For example, sport administrators may ask season ticket holders to sponsor groups or individuals who receive donated tickets by inviting them to their tailgate. Tactics that increase exposures will aid in bridging social capital between current season ticket holders and the beneficiaries of the donated tickets.

It is useful to understand season ticket holders' reasons for supporting ticket donations. In order of frequency, ticket holders favored donating tickets to fill the stadium and improve the game atmosphere, develop new fans, and for community impact. The idea of developing new fans warrants further discussion. Season ticket holders were interested in using ticket donations as a means to develop future – presumably paying – fans. Recent research indicates that children are more interested in building membership in the fan community, as opposed to the connection to the team (Reifurth, et al., 2018). Thus, donating tickets to groups of children (particularly when they can come with friends) would appear to be a promising way to develop social capital. Further, while not necessarily immediately related to social capital, developing new fans may be particularly important for children (one of the groups ticket holders want to donate to) whose brand associations are not as well-developed as adults (Walsh, et al., 2015). Of further interest, brand associations with youth are often developed through awareness of the brand mark (i.e., – the team mascot; Walsh, et al., 2015). Thus, when donating tickets to children groups, those donations may wish to include exposure to the team mascot, such as by providing a team shirt or an opportunity for a picture with the mascot. Further, youth could also be invited to (family-friendly) tailgating activities to allow relationships to develop with adults. Indeed, previous research supports interaction between youth and adults in sport as a potential means to develop social

capital and future community engagement within youth (Kay & Bradbury, 2009; Perks, 2007). However, it is also worth noting that social capital through sport may develop in ways that privilege those with higher existing levels of cultural and financial capital (Storr & Spaaij, 2017). Thus, in order to enhance the possibility of developing bridging social capital, it is important to ensure diversity across income, race, and gender when choosing which groups receive donated tickets.

Conclusion

This case study investigates the potential benefits of donating unused tickets to college football games as an avenue to facilitate social relationships that lead to social capital. In so doing, this study addresses the gap between theory and practice by exploring one possible practice (donating unused tickets) for building social capital. Previous research suggests that sport acts as a social anchor that can be used to develop social capital; however, specific results have been mixed. It is, therefore, essential to examine specific practices that leverage sport in the service of social outcomes such as the development of social capital. This study provides support for implementing programs to repurpose tickets that would otherwise go unused in order to fill seats and increase access. Ticket donations can promote social capital and demonstrate that, contrary to the assumptions of some sport administrators, ticket donations increase the perceived value of paid tickets.

These findings are a step toward investigating approaches for using spectator sport as a mechanism for building community level social capital. Results from this study provide evidence that attendance at college football games can increase individual level social capital for attendees. There is also evidence that the individual level experience of

paying ticket holders is enhanced by the shared experience of community in sport, and there were examples of sport transcending conventional class/race boundaries. The current study reports directly only on evidence of micro level social capital gains, but also reveals, in the interview data, incidents and sentiments that indicate macro/community level benefits from attending sports events, consistent with the building blocks of macro level social capital.

This study concludes that developing mechanisms for donating unused tickets for use by underrepresented community members, especially children or members of the military, has multiple benefits: it is not likely to reduce the perceived value of paid tickets, and it can enhance the experience of ticket holders as donating tickets appears a means for facilitating social capital. Though further research is needed to examine the direct impact of donating tickets toward building macro level social capital, this research represents an important first step toward this goal.

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CHAPTER III:
FOSTERING A SENSE OF COMMUNITY
THROUGH SOCIAL SPACES AT SPORTS EVENTS

Abstract

Sport facilities have been built using public subsidies and there is limited research about the community benefits derived from these investments. Broader community benefits need to be established to justify public funding of sports facilities, including how sense of community is developed among sports fans and, more specifically, the benefit of developing social spaces at these facilities to provide opportunities for attendees to interact and nurture a sense of community. The purpose of this study was to examine how fans used social spaces at a Denver Broncos NFL game and the Ironman World Championships and the meaning they ascribe to these spaces in order to understand whether social spaces cultivate sense of community. Two qualitative research approaches, non-participant observation and semi-structured interviews, were used to collect the data. Results demonstrate that attending a sports event in a fixed stadium or in a public space and interacting in social spaces facilitated positive feelings about the community for the attendees and can be contributors to fostering a sense of community. The qualitative research advances the theoretical understanding of social spaces, as a component of sense of community for sports fans, and expands on past research that focused primarily on sport participants. In addition to advancing the research on social spaces in a sport context, the findings provide practitioners with insight into the importance of developing social spaces at sports facilities, since sense of community can originate in social spaces.

Introduction

Sports events can have a role to play in fostering sense of community with their unique ability to bring people from divergent backgrounds together to interact, cheer and build relationships (Holt, 1995). Little is understood, however, about the community benefits of developing sports facilities because researchers have primarily focused on the economic impact (Baade et al., 2011; Siegfried & Zimbalist, 2006). "If the dynamics of how and when sense of community is or is not experienced in a sport setting becomes more clearly understood, sport managers can use this knowledge to better build and leverage community in ways that enhance the image of the region, university, or city, and even more importantly, improve the quality of life for its community members, including sport participants" (Warner & Dixon, 2011, pg. 260). Sense of community has the potential to unite communities and improve the quality of life for residents, because people who feel connected, accepted and supported also feel safe and secure (Francis et al., 2012). Sense of community has the potential to form when people share a common interest and come together and interact in social spaces (Legg et al., 2017).

Social spaces are common areas at sports events where fans interact, socialize and foster a sense of community (Warner, Dixon & Chalip, 2012). The importance of social spaces where people can freely interact and engage with others is essential in building community and social spaces help facilitate those interactions (Chalip, 2006; Warner et al., 2011). Many new sport facilities are purposely designed to include social spaces, and "organizations are beginning to understand how to leverage these not only toward enhancing the consumer experience, but also toward building community" (Warner & Dixon, 2016, pg. 48). Social spaces can make people feel supported, understood and

experience deeper connections that strengthen sense of community (Warner, Dixon & Chalip, 2012). Given that social spaces may help develop sense of community, and examination of social spaces provides a potentially practical way for sport leaders to develop sense of community. The purpose of this study is to explore the community benefits of utilizing sports facilities, specifically social spaces at the events, to foster sense of community to better understand the meaning fans assign to social spaces and whether social spaces cultivate sense of community.

Hosting sports events provide many positive outcomes for communities, but they also can lead to negative consequences including social, environmental and economic impacts. (Chersulich, Perić, & Wise, 2020). Social impacts are more difficult to measure because of the intangible impacts on local residents' quality of life, pride and sense of community. However, a concern is that an increase in tourism can result in cultural conflicts among residents and tourists, traffic congestion problems, security and crime concerns, as well as vandalism and even damage the environment (Bazzanella et al., Poczta et al., 2020; 2023; Jamieson, 2014). Sports events make a negative impact on the environment because of the size and scale with thousands of fans traveling in for the game that leads to an increase waste, air and water pollution as well as higher noise levels (Cashman & Hughes, 1999; Holden, 2000; Collins et al., 2005; Chersulich, Perić, & Wise, 2020). The economic impact is usually measured and communicated as a positive outcome from hosting major sports events, because of the direct and incremental revenue produced, such as new investment in infrastructures, employment opportunities, increased tourism, and tax revenues (Daniels, Norman & Henry, 2004). There are also negative economic consequences, including the disruption of normal business activity

because of congestion and traffic, and the costs associated with public expenditures to operate and promote sports events and invest in new infrastructure to support the event (Collins et al., 2005).

Billions of dollars have been invested in constructing sport facilities through public subsidies and very little has been done to assure these investments also benefit the community (Alexander et al., 2000; Richardson, 2016). One of those benefits can be the ability for sports facilities to generate sense of community through social spaces. Sport decision-makers are already prioritizing utilizing sports facilities to "offer the general public a sense of belonging, through social space and interaction, rather than holding the purpose of a sporting venue" (McGuire, 2019, pg. 11). This research further investigates the use and potential value of those social spaces.

Sense of Community and Social Spaces

McMillan (1976) argued for the direct effect sense of belonging has on fostering sense of community and showed the importance of conducting research on this subject-matter and initially defined sense of community as a feeling that members have of belonging. Additionally, sense of community has been described as a feeling that members matter to each other, a belief that their needs will be met together and that the emotional connection that results from sharing similar experiences and common places (McMillan, 1976). Four factors contribute to sense of community: membership, influence, integration and fulfillment of needs, and shared emotional connection (McMillan & Chavis, 1986; Prezza et al., 1999). Within the context of sports, membership is a sense of belonging, being part of your community, and willingness to sacrifice for the group, and is visible when fans wear their team's merchandise and share

knowledge of their team's history creating a shared emotional connection. Influence is having a say in the decision of the group and mattering to each other. An example of influence is a fan starting the wave at a sports event to get fans to enthusiastically cheer for the home team and improve the energy in the stadium. Integration and fulfillment of needs is investing in the success of the group and a feeling that needs will be met by the group (McMillan, 2011). Fans are fortunate that success can be shared when their team wins a contest and can also be a rewarding experience if they lose because of the support fans give each other. Sports events lead to a feeling of closeness and camaraderie with a group of other people, usually geographically proximate, who are not necessarily related through kinship (Smith & Ingham, 2003, p. 253). Shared emotional connection is the positive experiences and shared history that bonds the group. A shared emotional connection is apparent when fans recollect on past games that were memorable and bonds the group together. McMillan and Chavis (1986) believe that these four factors apply to all communities and the importance of the four factors will vary based on the unique attributes of the community and its membership. Therefore, sports fans are an important community to study to understand how these four factors are evident and can be impacted in a sport context.

Warner and Dixon (2011) adapted sense of community to make it more relevant and applicable to the sports industry and developed seven factors that facilitate sense of community: administrative considerations, common interest, competition, equity in administrative decisions, leadership opportunities, social spaces and voluntary action. Administrative decisions is the care, concern, and intentionality of the people who are in power that can impact the experience of individuals; common interests is the social

networks and friendships that result from having the same interests; competition is sharing the challenges, tension and pressure with others; equity in administrative decisions is when individuals feel they are being treated fairly and justly in comparison to others; leadership opportunities is visible when an individual takes on formal or informal leadership roles; social spaces are common areas where individuals can interact with each other; and voluntary action is when an individual joins a community without any external pressures. These seven factors were developed using a grounded theory and phenomenological approach through semi-structured interviews. Warner and Dixon (2011) analyzed the data using open coding and then grouped into these categories. Even though numerous studies have used this theoretical framework (Kerwin et al., 2017; Legg et al., 2017; Kellett & Warner, 2011), little is still understood about the specific components of each factor, so more research needs to be conducted.

In 2013, Warner, Kerwin and Walker modified the original model into a six-factor theoretical model for SCS by eliminating "voluntary action" from the original seven-factor model because it was not relevant to youth participants that are reliant on adults and therefore voluntary action was not applicable to both adult and youth sport participants. Warner, et al. (2013) determined that "an in-depth analysis of each SCS factor's impact is recommended to fully understand how sense of community influences other outcomes" (pg. 360). The SCS model contribute to the sense of the community theory by moving to a sport-focused model (Warner & Dixon, 2013; Warner, et al., 2013), but little is known about the impact of each factor on sense of community in a sports context. One factor that appears to be promising is social spaces, which is defined as common areas where fans interact with one another and foster a sense of community

(Warner, Dixon & Chalip, 2012). In one study, social spaces were a contributing factor to fostering sense of community and represented the most direct parallel to the theory of sense of community in sport (Legg et al., 2017).

The concept of social space has existed since French sociologist Emile Durkheim first acknowledged space as a key element in the structuring of social life (1898). Social spaces at sports events are generally defined as non-fixed seating spaces at the venue where fans can increase social interactions. Interacting in social spaces can strengthens a sport participant's sense of belonging (Warner & Dixon, pg. 266, 2011). The majority of sense of community research on social spaces in sport has focused on participants (Lyons & Dionigi, 2007; Warner & Dixon, 2011; Warner, Dixon & Chalip, 2012; Legg et. al., 2017). Sport participants have "acknowledged that social spaces strengthened their own sense of belonging" (Warner & Dixon, pg. 266, 2011), because social spaces enable opportunities to interact and develop relationships that lead to a sense of community (Legg et al., 2017). While most of the past research is focused on sport participants, there is limited research on social spaces for fans attending sports events (Swyers, 2005; Warner et al., 2011; Fairley & Tyler, 2012). Developing social spaces where people can gather increases social interactions and can foster sense of community among fans (Warner et al., 2011). Swyers (2010) expressed how social spaces were imperative to defining a sense of community in sport. Sports, therefore, create opportunities for social spaces to be studied and activated to foster sense of community among fans.

The Present Study

Past research focused on major sports events engendering positive feelings of enthusiasm, satisfaction and pleasure among residents (Chalip, 2006, Grieve & Sherry,

2012). Even though sports events may give residents a good feeling about their community, not enough is understood about the perception of attendees and how social spaces within sports facilities foster sense of community. Broader community benefits need to be established to justify public funding of sports facilities, including how sense of community is developed among sports fans and, more specifically, the benefit of developing social spaces at these facilities to provide opportunities for attendees to interact and nurture a sense of community. This is the gap in research examined in this case study.

The basis of this case study was to better understand the meaning fans assign to social spaces and whether social spaces at sports facilities cultivate sense of community. Most of the past research on social spaces focused on sport participants and there is limited research on social spaces for fans attending sporting events. Three studies provided the basis for this research because of their focus on fans: Swyers (2005), Warner et al. (2011) and Fairley and Tyler (2012). Swyers used an ethnographic account to demonstrate social spaces are an important attribute in creating a sense of community among bleacher regulars at Wrigley Field. The bleacher regulars are fans who sit in the bleacher seats and were self-described as one of the "last true communities in the United States." These fans built their sense of community by sharing social space and treating the bleachers as an anchor point for their community to connect and build relationships. Additionally, the space comprised of the bleacher regulars and the "yuppie crowd" strengthening the case for Wrigley as a social space because it could have meaning for two completely different segments of society (Swyers, 2005). The findings were limited, however, since the study only focused on the most avid fans, and may not be transferable

to the majority of sports experiences. Further, Swyers was one of the regulars as a loyal Cubs fan, so more research is needed to verify and expand on his findings, because observer bias has the potential to impact the validity of the results when the researcher's personal perspectives might impact the observations (Gall, Gall, & Borg, 2003). While the Swyers study exhibited the potential for sense of community to be fostered in social spaces at sporting events, Warner et al. (2011) found that fans who attend more games will recognize the benefits of gathering in social spaces and experience a greater sense of community. They examined how adding a Division 1 Football program at a university changes sense of community perceptions for students who attend games. Game attendees reported higher levels of sense of community and had a positive influence on four outcome variables: satisfaction, retention, current support of athletics, and future support for athletics. Warner et al. (2011) explained how future research needs to continue to examine how sense of community is fostered. Fairley and Tyler (2012) explored how sense of community can be built outside of attending a game in person by creating a third place for fans to interact by watching live baseball game broadcasts in central locations like movie theaters. Third place viewing sites are social spaces that are somewhere between home and the live sports event facility. Fairley and Tyler suggested future research should examine the use of third place for sports fans to create and nurture a shared sense of community.

Building on the previous studies, the purpose of this study was to explore how fans use social spaces at sports events and the meaning ascribed to these spaces, specifically at a Denver Broncos NFL game and the Ironman World Championships. This case study advances the theoretical understanding of the social spaces factor by

understanding how sports fans experience social spaces and how that relates to sense of community. Legg et al. (2017) recognized the need for practical applications because many sport management professionals are focused on in-game experiences and can neglect other areas where positive outcomes may develop. "Creating and fostering a sense of community within sport is important because of its potential to improve the life quality of those associated with sport organizations and programs" (Warner & Dixon, 2011, pg. 257). The findings from this study can also be applied to the sports industry by identifying and developing social spaces that enhance fan experiences through increased interactions.

The Research Questions

Central RQ: How does attending sports events and interacting in social spaces contribute to fans' sense of community?

Secondary RQs: What experiences or interactions in social spaces contribute to sense of community at sports events? What types of social spaces at sports facilities foster sense of community?

Methods

Philosophical Assumptions

The interpretive framework for this study was social constructivism because the research was intended to interpret the meanings other have about the world and include elements of the researcher's personal biases, since personal values and biases are present in all research. The ontological, epistemological, and axiological beliefs were visible because multiple realities were constructed through lived experiences, reality has been

constructed based on a combination of the researcher's experience and the views of the participants, and personal values are honored (Creswell, 2012).

Site Selection

This study was conducted at two major sports events: a Denver Broncos NFL game on September 25, 2022, and the Ironman World Championships on October 6, 2022. The Broncos stadium (Empower Stadium at Mile High) cost over $400 million to build in 2001 of which $300 million was funded by the taxpayers in the surrounding counties (Martinez, 2000). The club also received $54 million in federal tax exemptions (Blevins, 2017). The Ironman World Championships, on the other hand, takes place in Kona, Hawaii without any permanent facility construction needed to host the event.

An NFL game and a triathlon world championship provide two different, but ideal locations to address the research questions. Though each site represents the highest level of competition for its sport, the considerable differences provide an opportunity to compare the meaning of social sports in two different sport settings. The NFL is the most popular sport in America with sold out stadiums, the highest broadcast ratings and multibillion-dollar facilities. The NFL is recognized for developing exceptional premium experiences for fans who can afford to pay for that exclusivity. The average ticket price to attend a Denver Broncos game during the 2022 season was $529.95 (Camenker, 2022), so it is not accessible to lower-income community members. In contrast, the Ironman World Championship is free to attend, and since triathlon is primarily a participatory sport and there is no fixed facility required for the sport, the number of spectators is considerable smaller than an NFL game and the premium spaces were limited. Given these considerable differences, comparing social spaces can provide unique insights into

68

the role of social spaces in sport regardless of the scale and brand visibility of the event studied.

Data Generation

Two qualitative research approaches were deployed in this study: non-participant observation and semi-structured interviews. Interpretive research applies data collection strategies including observations and interviews to provide various perspectives and deeper context than is possible through a single study (Childs et al., 2013). The aim was to collect qualitative data about the social spaces at the events and understand any patterns that may exist. For this study, non-participant observation was used to understand where spectators congregate and interact at a Denver Broncos NFL game and at the Ironman World Championships. The role of the researcher was to be an outsider, who does not actively participate in the field but instead observes what actually happens (Smith & Caddick, 2012). Descriptive and reflective notes were taken as part of the observation and were performed discretely to ensure that attendees were not aware that they were being observed. Additionally, the researcher conducted semi-structured interviews at the events. They were conducted with a purposive sample of participants to gather the thoughts and perceptions of fans about the social spaces in the facility and whether those spaces contribute to a sense of community.

Non-Participant Observation

A non-participant observation was conducted at the Denver Broncos game and at the Ironman World Championships to monitor the space and the spectator interactions before conducting the interviews. The non-participant observation portion focused on spaces where fans congregate, activities take place, and bonds may be formed to provide insight into the social spaces where fans interacted outside of their fixed seats. The non-

participant observation coding categories were developed exclusively from past literature (Swyers, 2005; Chalip, 2006; Seippel, 2006; Warner & Dixon, 2011; Fairley & Tyler, 2012; Warner, Dixon & Chalip, 2012; Legg et al., 2017) and focused on connections formed, as well as nonverbal and verbal interactions and communication (see Table 7: Observation Coding Categories). The data was categorized into a list of indicative behaviors from past sense of community literature. The observation was conducted during the first 15-45 minutes in each location depending on size and the number of spectators in the space. A total of 18 spaces were observed at the two sites, inclusive of seven at the Broncos game and 11 at the Ironman World Championships. The non-participant observation was insightful and helped advance the interview process because of the time allotted to evaluate the space and understand how it is laid out, and to observe the interactions and engagement among fans before talking to them.

Table 7: Observation Coding Categories

Observation: Coding Categories	Predetermined Behaviors, Examples
Interactions: Connections, Nonverbal, Verbal (Swyers, 2005; Chalip, 2006; Seippel, 2006; Warner & Dixon, 2011; Fairley & Tyler, 2012; Warner, Dixon & Chalip, 2012; Legg et al., 2017)	Connections (C): Group Gathering, Meeting Proximity, Playing, Socializing Nonverbal (NV): High Fives, Smiles, Gestures Verbal (V): Talking, Cheering, Laughing, Screaming

This study included a combination of priori coding and emergent coding since some codes were used from previous research and other codes emerged during the observation and were applied during the interviews. The categorical aggregation allowed common themes and patterns to emerge., and follows the recommendation of Creswell (2012) who encouraged researchers to be open to additional codes emerging during the analysis to not limit the analysis.

Prior to attending the events, a map was printed and existing structured public social spaces were identified (See Appendix C for Map). Even though these predetermined spaces were determined before the on-site research began, the observation phase was important to identify additional spaces that were not specifically designed for fan engagement, but often functioned that way. The spaces, connections and verbal and nonverbal interactions were tracked through an observation field record sheet.

Table 8: Observation Field Record Sheet

Space	Connections	Non-verbal	Verbal	Total	Observational Notes
Structured Public Spaces					
TOTAL					
Unstructured Public Spaces					
TOTAL					
Premium Private Spaces					
TOTAL					

The observation field record sheet was categorized by three different types of social spaces: structured public spaces, unstructured public spaces and premium private spaces. Structured public spaces were sites at the facility that were intentionally built to enhance the fan experience. Unstructured public spaces were defined as spaces where fans naturally congregate but were not intentionally developed. The premium private spaces were exclusive to fans who paid a high price to gain access and the spaces were not available to the general public. Connections, verbal, and nonverbal communication

was tracked by recording meaningful interactions that lasted more than one minute. In this study, a social interaction was defined as verbal and nonverbal communication.

Semi-Structured Interviews

Non-participant observations identified social spaces at the event to gain an understanding of how sports fans use those spaces. Interviewing spectators provided additional context and a deeper understanding of how fans interacted and formed bonds in those spaces. The semi-structured interview questions were created from sense of community literature (Warner & Dixon, 2011; Warner et al., 2011; Warner, Kerwin, & Walker, 2013; Legg et al., 2017), and while questions were pre-written, they were adapted based on the responses from the participants. Clarifying questions were asked rather than being restricted with only predetermined questions (see Appendix D: Spectator Interview Questions). By paraphrasing participants' responses and probing for clarification, new information surfaced that may not have emerged without the flexibility the semi-structured interviews provide, because open ended questions "encourage thick and rich descriptions" (Smith & Caddick, 2012, pg. 64). In addition, a few closed-ended questions were asked about their demographic profile (e.g. household income).

The framework for the study related to social spaces in sports (Swyers, 2005; Warner & Dixon, 2011; Warner, Kerwin, & Walker, 2013; Legg et al., 2017), feelings about community (Chavis & Wandersman, 1990; Chalip, 2006; Grieve & Sherry, 2012), and sense of belonging (McMillan, 1976; McMillan & Chavis, 1986; Warner & Dixon, 2011; Fairley & Tyler, 2012; Warner & Dixon, 2013), and was developed by combining findings from past research with what was learned during the observation phase (see Table 9: Interview Coding Categories).

Table 9: Interview Coding Categories

Interviews: Coding Categories	Predetermined Descriptors
Social Spaces in Sports (Swyers, 2005; Warner & Dixon, 2011; Warner, Kerwin, & Walker, 2013; Legg et al., 2017)	Benefits of attending; Naturally occurring and setup spaces for interactions at facility; locations to watch game and meet people
Feelings about Community (Chavis & Wandersman, 1990; Chalip, 2006; Grieve & Sherry, 2012)	Pride; Connects me to community; Part of a larger structure; Civic participation
Sense of Belonging (McMillan, 1976; McMillan & Chavis, 1986; Warner & Dixon, 2011; Fairley & Tyler, 2012; Warner & Dixon, 2013)	Common interests; I feel comfortable/safe; Fit in with other fans; Bonding with others; Shared hobbies; Initiate conversations

The number of spectators interviewed was not predetermined, and the data collection concluded when data saturation occurred. Saturation of themes was used to determine the point at which enough participants were interviewed, because no new information was gained by continuing to gather data (Morse et al., 2002; Krueger and Casey, 2009).

The data collection for the semi-structured interviews included shorthand of the responses and field notes. The interview responses were immediately transcribed verbatim by the interviewer. Data were organized by type of social space (Structured Public Spaces, Unstructured Public Spaces and Premium Private Spaces), and then analyzed to understand the primary message content. The attitude and perceptions of the participants were evaluated, and the researcher determined whether the responses were isolated or shared ideas by multiple respondents. Content analysis was used to code and

categorize the patterns that emerged from the data and then the patterns were grouped into themes. These themes originated from the literature and were supported through the observation and interview phases through constant comparative analysis techniques (Strauss, 1987). Each participant in this study who referred to or mentioned sense of belonging, feelings about community or social spaces, was tracked by social space (see Table 10: Interview Data).

Table 10: Interview Data

Name	Loc.	Age	Gen.	Ethn.	Educ.	HH Income	Social Spaces	Feelings about Community	Sense of Belonging
Structured Public Spaces									
Unstructured Public Spaces									
Premium Private Spaces									

Reflexivity & Representations

The role and reflexivity of the primary researcher is important to note. Based on the researcher's direct experience as a sports practitioner, he put controls in place to limit his past experiences from influencing the study and analysis. He was cognizant of his personal bias, including sharing any personal experiences during interviews, because that "reduces information shared by participants in case studies" (Creswell, 2012, pg. 175). The researcher also used member checking directly after each interview by asking respondents to review their responses to ensure accuracy (Candela, 2019).

Methodological and investigator triangulation strategies were also used to substantiate the findings in this study by exploring the data from multiple perspectives: the lead researcher is an experienced sport administrator while the research assistant is a recent graduate beginning a career in sports. Methodological triangulation (Bekhet & Zauszniewski, 2012) is one way that the findings were supported because this study used both observations and interviews, which enhanced the understanding of the results. Investigator triangulation was used in this study during the analysis process by having other people review the field notes and the interview responses to make sure their interpretation matched the original analysis.

Findings

A total of 40 spectators were interviewed, 21 at the Broncos game (13 males, 8 females) and 19 at the Ironman World Championships (7 males, 12 females). The majority of spectators interviewed at the Broncos game (81%) were from the state of Colorado, while the majority of spectators interviewed at the Ironman World Championships (84%) were not from the state of Hawaii. The following demographic similarities are evident in the interviewees at both events: average age at the Broncos Game (44.2) and Ironman World Championships (45.9), the ethnicity was mostly white at the Broncos Game (62%) and the Ironman World Championships (74%) and the majority of respondents had at least a four-year degree (Broncos: 57%, Ironman World Championships (68%). The two sets of interviewees had differences including the average household income at the Ironman World Championship was 67% higher than at the Broncos game and the gender of the interviewees were predominantly male at the Broncos game (62%) and female at the Ironman World Championships (63%).

Four themes were identified in this study – social spaces provide more opportunities than fixed seats to interact and build sense of community; the most meaningful interactions between spectators took place in ancillary and structured public social spaces rather than premium private spaces; sports events bring people together from varying backgrounds and can facilitate a sense of belonging; utilizing social spaces at sports events can strengthen spectators' feelings about their community – all leading to an enhanced sense of community.

Social Spaces Lead to Increased Interactions

"Stadiums aren't built to make it easier for fans to hang out and socialize. They don't need to do much - just add places where people can stand and talk." Gabe (58)

Fans at the Denver Broncos game and spectators at the Ironman World Championships utilized social spaces to interact. The social space at the Broncos games where fans socialized the most and was one of the motivating factors for attending games was the pregame tailgate in the parking lot. The tailgates provided fans with the opportunity to socialize with each other and with strangers and develop traditions that incentivize them to keep coming back. "I've met more people in this tailgate than I've met living here for the past two years. It is a fun atmosphere that makes it easy to socialize," said Brittany (age 27) who was interviewed at the pregame tailgate in the parking lot. At the Ironman World Championships, the spectators created traditions directly associated with social spaces, because it gave the people who attend the event consistently the ability to spectate the event with the same people year-after-year. Jacob (age 67) who was interviewed on the sidewalk said:

Every time I've been to Kona, I stand in this same area, because this is where my wife stood when I participated in this race the first time. It brings me such fond memories. The first year I stood here alone and I met a lot of people who I helped if they looked lost or confused. Many of those people came back to this spot the next year. And every year, more and more people have come back to this same spot. We have created our own little community on this corner.

Broncos fans identified the need for more social spaces to be constructed because they were isolated to their seats for most of the game and were only able to have meaningful interactions with the fans directly surrounding their seats. Sitting in seats was the biggest prohibitor to meeting new people at Denver Broncos games, thus demonstrating the value in the intentional construction of social spaces. Multiple Broncos fans talked about the limitation of sitting in fixed seats instead of socializing with a larger group of fans while watching the game. Jorge (52) who was interviewed on the concourse said:

The only place that limits you from interacting with others is when you sit in your seats because you can only talk to the people directly around you. You get to know the people around you more intimately, but you don't get to meet and talk with a lot of people, so it limits the number of people you can talk to.

Ironman World Championships spectators enjoyed the freedom of being able to walk around and not being confined in fixed seats. That sentiment was expressed during nearly every interview. Conversely. multiple spectators also mentioned the need to add a more structured seating experience as an alternative to the flexibility that currently exists. Erin (age 41), was interviewed on the sidewalk, and suggested the need to have more

"official spaces" to hang out, but would not trade the freedom to socialize and watch the race from any place without restrictions:

> I especially enjoy that I have the freedom to walk around with very few restricted areas. I wish there were a few more official spaces to hang out, but I wouldn't trade that for the all-access feeling I get from watching the race from anywhere I want to. I'm used to watching sporting events in stadiums, which is a boring environment for me because you only sit in one seat the entire game and don't get to move around or interact with a lot of people.

> Attendees of both the Denver Broncos game and the Ironman World Championship event yearned for more opportunities to socialize. They recognized that some key spaces were missing that would help provide opportunities for interactions to take place. For Broncos fans, they were limited by the fixed seats where they purchased tickets and on the other end of the spectrum, the Ironman fans had too much freedom that they desired more structure.

Meaningful Interactions Occur in Social Spaces

The non-participant observations provided the framework to make the semi-structured interviews more constructive to observing how spectators utilize social spaces. Eight respondents at the Broncos game and two respondents at the Ironman World Championships were interviewed in structured spaces, which were intentionally built to enhance the fan experience. Tailgating in the parking lot was considered structured space instead of unstructured because they have a formal process developed for securing tailgating spots and a tailgating policy. Four Broncos fans and 11 IWC spectators were interviewed in unstructured space where fans naturally congregate but are not

intentionally developed by the event organizer. The reason for the large number of spectator's interviewed in unstructured space at the IWC is because the majority of the fans watched from the sidewalks and there was only one area for bleacher seating and the seating was free and not reserved. Nine of the fans at the Broncos game and six at the IWC were interviewed in premium private spaces that were exclusive to fans who pay a high price to gain access.

Most of the meaningful interactions between spectators took place in ancillary spaces (e.g. pregame tailgate in the parking lot) and in structured public space (e.g. Bud Light Rooftop). The fans in these spaces were friendly and often interacted with strangers and Randy (age 48), a Broncos season ticket holder for over 10 years, shared his personal experience when interviewed in the parking lot before the game:

> The best place to meet people and build relationships is pregame tailgating in the parking lot. The same people come each week, so you get to know them on a deeper level, and new people join, so the group expands throughout the season. Even with complete strangers, all you have to do is make eye contact and they will stop and talk with you. I've built lifelong friendships here. It is a special place.

The premium private spaces (pregame VIP tailgate and club level) were high-price private spaces that ironically did not lead to more interactions among fans. In fact, the fans in the premium private spaces kept to their own, while the fans in the public spaces were more social as was evident during the observations and reflected in the field notes taken by the researcher,

Have a great aerial view and I can look into the club and observe without anyone knowing I'm here. Similar to the VIP tailgate because most fans are not interacting but it's a much nicer space. Most people are trying to get their food and drink before the game starts. As the game started, most fans are going to their seats, but many are staying in the club and hung out with their friends. The bar is the best place for fans to interact who don't know each other. They are cheering when the Broncos make a good play and boo when they don't. Seeing multiple high fives. One 49ers fan started. yelling at the Broncos fans.

The Ironman World Championships was not a ticketed event held in a fixed facility, but rather a free event held in the streets of Kona, Hawaii. The spectators were much more engaging with each other and carried on long and meaningful conversations. Similar to the NFL game, the spectators in the VIP areas at the Ironman event primarily interacted with the people they already knew and rarely networked with strangers. Nearly all the spectators in the public unstructured spaces were approachable and amiable to everyone who passed by. It seemed as if the spectators wanted to share the experience with everyone else.

Challenging to walk through the crowd because there are so many people on the sidewalks. Found a spot on a small wall where I could watch both sides of the street, the merchandise tent and the hotel entrance. It feels like a big party. People are talking, music is playing, people are high fiving. Many people reconnecting with friends and family that they hadn't seen. Strangers are talking to each other too…Great place to interact.

Social Spaces Facilitate Sense of Belonging

"I've never felt more included and welcome than I did when I attended this race." Ron (age 59)

Fans in this sample discussed how important attending sports events are to strengthening existing relationships and facilitating conversation with strangers that enhance their sense of belonging. Sports events can bring diverse groups of people together from varying backgrounds and can make people feel welcome and provide a sense of belonging. It was evident at both the Broncos game and the Ironman race. Nathanial (age 74), a Broncos fan explained how the games made him feel so welcome that he remained living in Colorado when he probably would have moved without this experience.

> I've lived in Colorado for over 25 years, and as a Black man, I have never felt completely accepted by my community. The only time I feel completely embraced and accepted is at Broncos games. You can cheer and interact with anyone and everyone regardless of where they live or what they look like. I probably wouldn't have stayed in Colorado if the Broncos weren't here to make me feel accepted by my community.

Alex (age 38) shared how he held perceptions that he would not be welcomed by the fans at the Ironman World Championship because of his weight:

> To be honest, I was dreading being here to cheer on my friend, because I'm overweight and out of shape and thought I would be judged by all the fit people. I couldn't be more wrong. The triathlon community has made me feel part of their community and it has encouraged me to start working out. I've been walking

every day I've been here and plan to continue staying active when I go back home.

A feeling of belonging can be attributed to the commonality of fans that cheer for the same team. That shared bond leads to fostering a sense of community. Antonio (age 42) shared how his fandom for the Denver Broncos provided a sense of belonging: "I feel like I belong here because we are all cheering on the same team and are rooting for our city."

Sports events also made visiting fans feel welcome and left positive impressions about the city. Mickey (age 63) said:

As a 49ers fan, I was pleased with how friendly and courteous the Broncos fans are. They made me feel comfortable even though I'm wearing 49ers gear and I live in California. I will come back to Denver to attend a game.

Football fans are avid, but the fans of Ironman have a unique relationship with the sport because many are also participants of the sport and not just fans. The Ironman World Championships is a race for professional triathletes and the best age group athletes in the world. Competing in Kona is the ultimate goal for most triathletes because it is where Ironman's first race was held in 1978 and it has been the home of the World Championships for decades. Because of this affinity and history, the spectators openly shared how this event makes them feel. Gloria (age 35) expressed how this is the first sports event that makes her feel like she belongs:

I traveled all the way from Spain to be here and this is the first time I feel like I belong at a sporting event...ever. My father took me to futbol games, and I would cheer for our team, but I never felt like it was my sport. I've been to a dozen other

sporting events over my life, and I couldn't wait for the game to end. Being here, I finally feel like this is my sport and I feel completely welcome by the people here today. This is personal to me, because I signed up for and completed my first triathlon during the pandemic, and my long-term goal is to compete in the Ironman World Championship. I get to be here to watch it this year, which is exhilarating.

The participants in this study conveyed the positive impact attending these events had on their sense of belonging. Attending these events made them feel welcome and altered decisions they made in their life; for example, the interviewee who would have moved because he did not feel welcome until he became a Broncos fan, and the spectator at the Ironman World Championships who was concerned about being judged because of his weight and instead felt accepted by the triathlon community.

Social Spaces Strengthen Feelings about Community

"Sports events definitely foster a positive sense of community. Why else would you wear a city's name on a jersey and cheer?" Rebecca (age 58)

The results from the interviews at the Broncos game indicate that attending sports events and interacting in social spaces had an impact on the way people feel about their community. Sports events have an opportunity to build pride and a connection to the community for recent transplants. Vanessa, attending her first Broncos game, explained the impact it has had on her:

I recently moved to Denver, and this is the first time I've felt connected to the community. My neighborhood in downtown is really welcoming and inclusive, but this is the first time I felt pride in living in this city.

Pride is a word that appeared in multiple interviews when fans were asked how attending games makes them feel about their community. Brittany shared a similar experience:

So far, this experience is making me feel excited about living here. I have only lived here a few years and I don't quite feel like it's my home yet. This experience helps me feel like I'm becoming a local.

The Ironman World Championships, on the other hand, is primarily attended by non-locals with 20,000 athletes and spectators that travel to Hawaii for the race (Mackinnon, 2022). Every spectator spoke highly of the local community – the culture, the beauty of the landscape and the feeling of connection to the community. Michael (46) said, "I feel like Kona is my second home. I would spend every vacation here if I could. We used this as a Racecation each year." Multiple past participants moved to Hawaii after competing in the World Championships, including Joanie who moved to Kona after competing in the race for many years: "I loved it so much I decided to move here in 1998. So, yes, attending this event made me appreciate this community, so much so that I moved here and changed my entire life." Kona means a lot to past participants and improves their experience as spectators too. Brenda (age 54) is a past participant who openly shared how meaningful this community is to her: "After competing here, this place means even more to me because I can remember each part of the race so vividly. I'm proud that I raced here and it makes my experience watching even better."

Community in triathlon is not defined by a fixed location but rather by feeling connected and the common bond shared by the participants in the sport and are fans of the sport (Lyons & Dionigi, 2007). In addition to the admiration spectators at the Ironman

84

World Championships have for the host community they take pride in the multisport community. Brenda (54) said: "Being here makes me feel more closely connected to the multisport community and to the local culture here in Hawaii." Everett (42) explains the importance of this event to bring his community together each year: "The multisport community is incredibly tight and connected with each other. It is like a reunion every year I come here."

Past studies have displayed negative consequences on residents when there's an influx of visitors to a community that can impact their quality of life, and lead to social fragmentation and disruption of their daily lives (Moisescu et al., 2019; Slemp et al., 2012; Andereck et al., 2005). This study supported those results. While the tourists had only positive responses about Kona and the positive impact of the Ironman World Championships, some members of the local community are against the event because of the negative impact it has on the community. Local resident Malikai (age 54) who wore an F-Ironman shirt during the interview expressed his disdain for the event:

> This massive event takes over our community for one week completely disrupting our way of life and then it's gone until the next year. I feel that my community has been duped into thinking this event brings about recognition for our community and an economic impact. In my opinion, it brings much more harm than good (traffic, congestion, environmental impacts) …I want everyone to know that Ironman is lucky to hold their World Championships here and that many members of our community don't like them being here. The visitors need to do more to positively impact our community while they are here. Yes, they stay in hotels and spend money. But what are they doing to improve our community that leaves a

lasting impact? Ironman does a small community outreach project to act like they care. The 25,000 people who visit our beautiful island this week are taking advantage and not leaving a lasting impact. I want them to acknowledge that they need to do more.

Social Spaces Lead to Sense of Community

A connection between social spaces in sport, feelings about community and sense of belonging among fans, was established through the data collected in this study. Social spaces allow for interactions to occur for attendees at sports events and those interactions contribute to enhanced sense of belonging and feelings about the community, and both factors foster sense of community (see Concept Model 1: Social Spaces Leads to Sense of Community). This study provided insight into the importance of developing social spaces at sports facilities, since sense of community can originate in social spaces.

Concept Model 1: Social Spaces Leads to Sense of Community
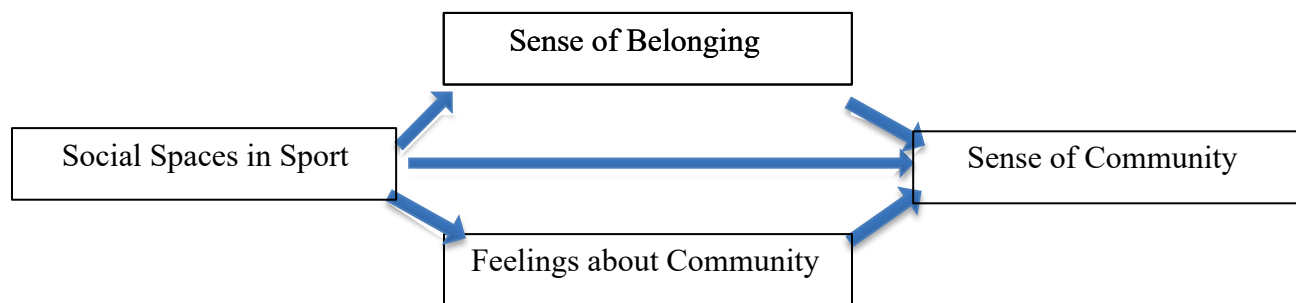
Discussion

This case study advanced the work of Warner, Kerwin and Walker (2013) by exploring how social spaces foster a sense of community for sports spectators. Warner, Kerwin and Walker (2013) developed a six-factor theoretical model for sense of community and recommended future research focus on conducting an in-depth analysis

of each factor because little is known about the impact of each factor on sense of community in a sports context. One of those factors is social spaces where fans interact with one another and foster a sense of community (Warner, Dixon & Chalip, 2012). Social spaces are a component of sense of community and sports events provide a platform for interactions to occur between spectators. The present study set out to understand how fans utilize social spaces and the meaning they attributed to their experience at two prominent sports events, which expands on past research that focused primarily on sport participants. The semi-structured interviews supported many of the findings from the observations.

The findings in this study on spectators are consistent with past studies on participants that bonds are formed in social spaces, and it leads to a feeling of belonging and an enhanced sense of community. As noted, in the context of sport, past research has primarily examined sport participants rather than attendees and there is a need for research exploring the connection between sport spectators and sense of community (Legg et al., 2018; Swyers, 2005; Lyons & Dionigi, 2007; Warner & Dixon, 2011). This is the gap in research examined in this case study to determine whether sports fans, like participants, who interact in social spaces foster a sense of community.

The study demonstrates that attending a sports event in a fixed stadium or in a public space and interacting in social spaces facilitates positive feelings about the community for the attendees and can be contributors to fostering a sense of community. The enjoyment and pride spectators get from sharing the experience with family, friends and other residents, leads to an enhanced sense of community.

Sports facilities are predominantly comprised of fixed seats where fans sit and watch games from one location. This study supported the results from Study 1, *Ticket Donations as Facilitators of Social Capital*, that relationships are formed in ancillary spaces like tailgating in the parking lots before the game more so than fans sitting in fixed seats. The Ironman World Championships was not a ticketed event with fixed seats and the spectators were much more engaging with each other and carried on long and meaningful conversations compared to Broncos fans who were restricted to their seats and were only able to have meaningful interactions with the fans directly surrounding their seats. The Broncos fans interacted much more frequently and longer in social spaces than those sitting in fixed seats. This study indicated that social spaces provide more opportunities than fixed seats to interact and build sense of community.

Additionally, this study explored the differences between fans with exclusive access to private premium spaces compared to fans with access limited only to the public social spaces needs. The most meaningful interactions between spectators took place in ancillary and structured social spaces with no cost to enter compared to private structured spaces where the interactions were exclusive and rarely extended beyond the preexisting in-groups. The interactions in the pregame tailgate in the parking lot were natural and inviting of interactions between strangers. The Bud Light Rooftop was a structured public space that was free to enter and the fans were friendly and often interacted with strangers, On the contrary, the premium private spaces including both the pregame VIP tailgate and the club level were high-cost private spaces that did not lead to more interactions among fans because the fans in those spaces rarely communicated outside of their preexisting friends and family. This an important finding because it showed that social spaces that

are free and less exclusive can contribute to sense of community more than private exclusive spaces where fans rarely interacted with other fans. The practical application of this finding is that sport managers can develop social spaces that are free for fans to utilize to enhance the game experience and contribute to a sense of community.

Limitations

There were research process and methodological limitations to this study. The primary limitation of this study was the length of the interviews that limited the number of respondents based on the lack of budget to hire a research team to conduct an in-depth study of each social space. The researcher had to move from space-to-space throughout the event rather than observing and conducting interviews in each space longer, which led to a smaller sample size. The number of interview questions was also a limitation, since there were 17 questions. After conducting the first 3-4 interviews, it was evident that each interview was taking too much time and some of the questions were not providing any new data or insights. The researcher should have adapted the semi-structured interviews in real time and only asked the most pertinent questions. If budget was not a factor, a research team would have traveled to both Denver and Hawaii and studied each social space through the entirety of the event and been able to interview more attendees. Furthermore, the study would be replicated at multiple Broncos games rather than one game, and across the men's and women's Ironman World championship instead of only the women's race.

Future Research

This study should be replicated at other sports events and venues to demonstrate the meaning and value of social spaces at sports facilities to enhance sense of community. By replicating this study at other sports events, it may support the findings in this study

that sense of community can be facilitated in social spaces at any sports facility whether indoor with 70,000 fixed seats or outdoor with primarily standing room only. Social spaces need to be looked at more closely to understand why and how they enhance sense of community.

Further exploration of the differences between fans with exclusive access to private premium spaces compared to fans with access limited only to the public social spaces needs to be explored. Based on this study, these are two very divergent segments. Spaces that are private are well planned out and specifically designed for social interaction. Practically, it would be interesting to create premium spaces accessible to the general public, similar to the Bud Light Rooftop at the Denver Broncos game, to see if that fosters a sense of community more than a standard structured public space. Future studies could also compare the public and accessible nature of the unstructured public spaces where people from all backgrounds interact and connect compared to the premium private spaces where only an exclusive group is admitted.

The study has naturalistic generalizations, so this research can be applied to other populations. Theoretically significant research builds on existing knowledge and leads to a theoretical contribution by examining existing concepts in a different context (Tracy, 2010). The findings are intended to not only advance sense of community in sport research and change the way sports facilities are constructed to include more social spaces, but it can also be applied to other facilities like art museums, opera houses, concerts, festivals and more. The transferability of the findings to other settings are constrained by factors, such as the competitive nature of sports, and that social spaces at sports facilities are primarily built to increase revenue and can be exclusive. The

elements that facilitate the transferability of the findings include but are not limited to the public nature of the venues, that the attendees are fans of the team, artist, or musician/singer/performer, and that practitioners desire to enhance attendees' experiences at these venues. More research is encouraged to apply the conclusions from this study to other contexts outside of sport.

Future research should evaluate how to limit the impact of major sports events on the residents who live in the community because of traffic, congestion, and other issues they deem problematic. The unintended consequence of hosting these massive events is the potential negative impact on local community members who are not able to or interested in attending. The Ironman World Championship supported previous findings that some local community members have a negative response to these massive events in their communities. It is important to understand why some residence despise these events and what the event producers would need to do to make the event more valuable asset to all members of the community, including providing residents with access to social spaces at sports events to facilitate a broad-based sense of community.

It became evident during this study that additional research on social spaces at sports facilities needs to be extended to other events held in the facility that benefit the community. One fan said: "I don't understand why these public stadiums aren't utilized to benefit the community throughout the year. It seems like they open up for their respective sports seasons and then shutdown the rest of the year." Future research can be conducted to understand the value of social spaces in sports facilities to the local community when non-sporting events are held.

Conclusions

Sports events bring people together from varying backgrounds and can facilitate a sense of belonging. The camaraderie of fans that cheer for the same team builds a bond that has the potential to foster a sense of community. Spectators at both the Broncos game and the Ironman World Championships expressed how sporting events strengthened their existing relationships and facilitated conversation with strangers that enhanced their sense of belonging. Attending these events made them feel welcome and a sense of belonging. The results from this study corroborated Warner and Dixon's (2011) findings that interacting in social spaces strengthens a sport participant's sense of belonging. Social spaces provided spectators with an opportunity to socialize and enabled a sense of belonging.

Utilizing social spaces at sports events can strengthen spectators' feelings about their community. This study expanded Govinden's (2018) contention that "Public sport spaces in communities' act as social spaces that facilitate community development." Spectators at both the Broncos games and the Ironman World Championship attributed attending the events to an enhanced feeling about the local community. That was especially evident for fans who recently moved to the community because they attributed attending the event to building pride and connection to their new communities. While the spectators were positive about the experience, some residents felt the events had a negative impact on their communities. The recommendation to sport managers is to spend more time understanding the needs and concerns of the local community and addressing them to minimize the negative impact on residents.

This study displayed the value of developing social spaces when building sports facilities at building a sense of community. The findings will help provide meaning to social spaces at sports events through the experience and views of attendees. This study is valuable to advance both the sense of community theory and may lead to sports facilities being constructed with the community as a priority. Instead of using economic benefits to justify the investment in building sports facilities, broader community benefits should be prioritized, including cultivating sense of community. Sports facilities are physical assets for society, lead to social interactions, and establish social connections that may not occur if these facilities did not exist (Rosentraub & Lija, 2008). Acknowledging that social spaces contribute to sense of community provides insight for sport managers to develop program space that elicits interactions (Legg et al., 2017). The findings if applied in the sports industry will alter the way facilities are constructed to maximize social spaces for community members to connect and bond. In addition to advancing the sense of community theory, the outcomes provide practitioners with more context and support for adding social spaces in sports facilities to improve the fan experience and foster sense of community.

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CHAPTER IV:
SPORT SENSE OF COMMUNITY IN A VIRTUAL SPACE:
COVID-19'S IMPACT ON SPORT PARTICIPANTS

Abstract

The COVID-19 pandemic decreased opportunities for sport participants to interact and build a sense of community because of the stay-at-home orders and facility shutdowns. For months, participants were unable to train or compete, had limited face-to-face contact with their teammates and coaches, so they were primarily interacting virtually. As a response to the pandemic, sports organizations and technology companies leveraged existing technology and created new technology to engage and connect with fans and participants. This case study utilized the Brief Sense of Community Index (BSCI) and the Sense of Community in Sport (SCS) instrument to explore the impact the pandemic had on sense of community in a virtual space among endurance sport participants, specifically members of USA Triathlon, the Olympic and Paralympic National Governing Body for the sport in the United States. The research showed that USA Triathlon members were not materially impacted by the pandemic because they adopted alternative virtual engagement opportunities that replaced in-person activities.

Introduction

The United States surgeon general issued an advisory on May 3, 2023 that America is facing a loneliness epidemic that is impacting public health because it increases the risk of depression, anxiety, suicide, cardiovascular disease, dementia, stroke and premature death (Murthy, 2023). Sport can be one way to address the loneliness epidemic. However, the COVID-19 pandemic kept people from participating in sport activities and sport participants had elevated levels of psychological distress during the pandemic (Uroh & Adewunmi, 2021). The United Nations report on the impact of COVID-19 on sport, physical activity and well-being, explained that "Sport has long been considered a valuable tool for fostering communication and building bridges between communities and generations (Bas et al, 2020, pg. 1)." Sport participation is beneficial for physical and mental health and contributes to social well-being (Son et al, 2021; Caputo & Reichert, 2020). Physical activity has a positive impact on mental health; Alamdarloo et al. (2019) found that sport participants had lower levels of anxiety and severe depression compared to non-participants. Moreover, during the pandemic McGuine et al. (2021) determined that adolescent athletes who returned to participation in the fall of 2020 reported dramatically lower anxiety and depression.

Spectator and participatory sports across the world shut down in March 2020 because of the spread of the COVID-19 virus. Fans and participants were quarantined in their homes, because sports facilities were locked and went unused to reduce the spread of the virus, thus depriving fans from attending events and participants from engaging in sport activities. Even when sports events and practices returned, social distancing became a norm in all public places (Mastromartino et al., 2020), and 72% of Americans polled by

ESPN were concerned about attending a sports event without a vaccine for the coronavirus, so the attendees were limited to the 28% who were willing to attend without a vaccine (Cohen, 2020). Because of these factors, sports were deeply impacted by the pandemic because of the shutdown and the slow return to opening communities and allowing sport participation and attendance at events (Garcia-Garcia et al., 2020; Gössling, Scott and Hall, 2020; Parnell, et al., 2020; Lashua et al., 2021). This study focuses on the impact the pandemic had on building a sense of community for sport participants, specifically members of USA Triathlon.

Sports are intertwined with communities, decisionmakers and public opinion. The National Basketball Association announced they were postponing a game on March 11, 2020 and the next day suspended the season while the United States government waited until March 13 to declare the pandemic a national emergency. Event cancelations and postponements of major events became commonplace in 2020, including the postponement of the Olympic & Paralympic Games for the first time in the history of the modern games (Bas et al, 2020), and the cancellation of the New York City Marathon, which is the world's largest marathon in the world with 50,000 participants and a $415 million economic impact (Martin & Hall, 2020). Scheer, et al. (2021) examined the effects of COVID-19 related event cancellations on the endurance and ultra-endurance running community and found that the number of major endurance events dropped 71% from March through October 2020 (p. 4). The economic impact of COVID-19 on United States sports leagues was estimated at $13 billion and nearly 1.5 million jobs were eliminated (Skinner & Smith, 2021). The sport industry was forced to respond and create

new and innovative ways for fans to connect to their favorite teams and participants to train and compete.

Physical activity was suspended during the shelter-in-place mandates, and participation in clubs and events were halted during the pandemic (Son et al., 2021; Mattioli et al., 2020; Lachance, 2021). As a result, sport participants who utilized technology to connect with each other, including participants of races like the New York City Marathon who competed in virtual races, athletes who trained with emerging fitness technology like Zwift or Peloton and sport clubs that hosted meetups using interactive group communication services like Zoom were less impacted by the restrictions of the pandemic (Grix et al., 2021; Thibaut et al., 2020). The COVID-19 pandemic highlighted the importance of technology use in the sports and fitness industry (Moustakas et al., 2020). Zwift is an interactive cycling application which enables millions of account holders to ride their bicycles on a personal trainer in their homes using virtual routes and data to track the workout (Reed et al., 2023; Bentvelzen et al., 2022). Giles (2020) found that the increasing number of Zwift users "demonstrates triathlon's adaptability to changing social conditions, further emphasizing the importance of understanding the spatial, social, and digital worlds of different sporting communities to ensure physical activity remains accessible (pg. 371)."

Because of the COVID-19 restrictions, social connections could only take place in virtual spaces, so the sport industry had to be innovative and develop virtual participation activities. Virtual participation activities had benefits beyond positively impacting physical health, because social activities and maintaining social connections were integral to the health and well-being of individuals during the pandemic (Son et al., 2021). This

study explored the impact of virtual spaces on sense of community among members of USA Triathlon, the Olympic and Paralympic National Governing Body for the sport in the United States.

Sense of community is the feeling individuals have of belonging, that they matter to one another, that their needs will be met through their commitment to be together, and that the emotional connection results from sharing similar experiences and common places (McMillan & Chavis, 1986). These are all factors that sport participants share, so sport is an ideal facilitator of sense of community because of the commonality that exists between participants and the commitment to each other and the experiences they share together. One of those common places that facilitates interactions contributing to sense of community are social spaces – common areas where individuals can interact and engage with one another (Warner, Dixon, & Chalip, 2012; Chalip, 2006). The advances in technology have expanded social spaces beyond physical spaces to include virtual spaces (Lizzo, 2019).

Leveraging Technology

The role of digital technology in physical activities has increased significantly for sport participants in recent years with a focus on cycling (Buning & Gibson, 2016; Van Melik & Spierings, 2020), running (Carlén & Maivorsdotter, 2017; Shipway et al., 2015; Shipway & Jones, 2008) and triathlon (Bridel, 2010; Lamong & Kennelly, 2019; Giles, 2020). Fitness technology has been shown to enhance motivation (Ba & Wang, 2013), knowledge and sharing (Jong & Drummond, 2016), and social support and interaction (Zhang et al., 2016). As a response to the pandemic, sports organizations and technology companies leveraged existing technology and created new technology to engage and

connect with fans and participants. Fans could follow their favorite sport sports teams wherever they live because of technological advances (Gantz & Lewis, 2014) and the media has provided unrivaled access to a global audience providing fans with an insider's view that they can experience without physically attending a sports event (Kerr & Emery, 2011).

Endurance athletes have used technology to record and analyze their performance by adopting social functions embedded into these platforms to connect with other athletes adding a new virtual social support dimension to physical activity (Barratt, 2017; Stragier et al., 2018). There are many socially-enabled indoor training applications, such as Zwift, Trainer Road and The Sufferfest, that allow athletes to interact with other athletes while they train in a virtual environment (Arthurs-Brennan 2020). The applications experienced considerable growth before and during the pandemic; Zwift grew from approximately 200,000 users in 2016 to 3.3 million from 190 countries by February 2021, double the number of users from the prior year (Denis, 2022; Lunden 2018). These applications provided a social platform for triathletes to utilize to maintain a sense of community during the pandemic.

Sense of Community in a Virtual Space

Sense of community is a perception that individuals have of belonging and that their needs will be met collectively through shared experiences in common places (McMillan & Chavis, 1986). Sense of community was initially proposed by Sarason (1974) in the field of community psychology. A strong sense of community reduced the impact of pandemics because it gives individuals the feeling that they were not alone in

the crisis and that others were experiencing similar difficulties (Al-Omoush, et al., 2021, Boyd & Martin, 2020).

Sense of community has been applied in the context of sport (Lizzo & Liechty, 2022; Legg et al., 2017; Warner, Kerwin and Walker, 2013; Warner & Dixon, 2011). Warner and Dixon (2011) developed sense of community in sport theory (SCS) with seven factors that facilitate sense of community: administration, common interest, competition equity in administrative decisions, leadership opportunities, voluntary action and social spaces. Warner, Kerwin and Walker (2013) adapted the model and developed a six-factor theoretical model by removing voluntary action while including the original six factors, including social spaces. Swyers (2010) illustrated how social spaces were imperative to defining a sense of community in sport. Social spaces are defined as a common area or facility in which athletes could interact with one another (Warner, Dixon, & Chalip, 2012). Swyers questioned whether social space needs to be physical: "It remains an open question if social space has to be physical; inasmuch as it is the shared idea of what Wrigley is and means that binds the regular, it seems the same could work for cyberspace or for diasporic groups (pg. 151)." This study will advance the research on non-physical or virtual social spaces.

Recently research has recognized that, using technology, sport communities can also be virtual (Fenton, 2023; Lizzo & Liechty, 2023). Sense of community in sport technology (SCST) was developed to evaluate the six-factors in a sports context through a virtual environment. The term virtual community originated in the early 1990s when Rheingold (1993) described it as personal relationships that were developed through technology and later added that virtual communities are online places where people

105

socialize in a different way than in face-to-face interactions (Rheingold, 2000). Virtual

communities have recently been defined as "a social space created and maintained by

people who have the necessity or the desire of a safe shared space" (Miño-Puigcercós,

Rivera-Vargas & Romani, 2019, pg. 124). The proliferation of virtual communities has

been inevitable because of the increase in improved and accessible technology (Schultz &

McKeown, 2018; Ridings et al., 2002; Hagel & Armstrong, 1997), but there is limited

research exploring leisure-based virtual communities (Lizzo & Liechty, 2020).

Technological advances and new forms of socialization have led to the development of

virtual communities (Lizzo, 2019). According to Witmer et al. (1996) virtual spaces can

simulate real world activities and places, because the physical and digital world have

become ever more intertwined (Graham, 2014; Lane, 2012). Virtual spaces have emerged

for sport participants who can connect, train and interact in virtual spaces, especially

during the COVID-19 pandemic.

Virtual communities created a sense of community through increased interactions

building close relationships among members of the community, allowing for information

and common feelings to be shared, and aiding in developing a sense of belonging (Lu et

al., 2011; Koh & Kim, 2003). Schubert and Ginsberg (2000) found that virtual

communities exchange experiences and interests, which creates linkage between

individuals and groups. Sense of virtual community is the perception of belonging and

attachment to a given community when facilitated through the use of information and

communication technologies (Naranjo-Zolotov et al., 2019; Cheng et al., 2012). Ferriter

(2009) examined Wikipedia as a tool for sport fans that was "developed in an imagined

social space that builds another location for community (p. 149)." Another sport study

showed that sense of community was similar in face-to-face communities and virtual communities (Blanchard & Markus, 2002). Technology led to new social spaces of interaction and enabled more access because an individual's physical presence is no longer a prerequisite to participate in and develop a sense of community in social spaces (Rheingold, 1991; Wellman, 2001; Obst et al., 2002).

The return to sport protocols in the United States were determined at the state level so there was inconsistency across the country in what facilities and activities were allowed (McGuine et al., 2021). During the COVID-19 pandemic, many community officials approved the return of elite sport over grassroots sport when professional sports were allowed to continue playing, albeit with restrictions, while prohibiting grassroots, community and participatory sport (Grix et al., 2021). Sport participants were physically separated and were only able to connect virtually. Because of this, virtual sense of community may be useful in studying the impact COVID-19 has on sense of community and social spaces in sports. Many of these shared experiences were held in virtual social spaces and have the potential of fostering a sense of community. Even though virtual communities have been in existence for over 30 years, research on leisure-based virtual communities has only recently emerged (Lizzo & Liechty, 2020). The emergence of new forms of technology and greater access to technology has lowered the barriers to enter a group and foster sense of community, increasing the need to study virtual communities because of the value they can provide to heterogenous individuals (Nimrod & Adoni, 2012; Lizzo & Liechty, 2020). During the pandemic, the world used the virtual environment as a way to connect and interact, and this was also evident among sport participants who were separated and unable to spend time and train together in person.

107

Research has recently emerged on the impact of virtual communities on sense of community in a leisure setting including recreation (Scarles et al., 2020), festivals (Gradinaru, 2021), spectator sports (Radmann & Karlén, 2022) and especially relevant to this research - endurance sport participants (Chen et al., 2023). One such study was conducted by Lizzo and Liechty (2020) on the Hogwarts Running Club, a Facebook community, with two shared interests – running and Harry Potter. The group hosts virtual races, interacts online and shares stories and common experiences. Chen et al. (2023) studied the impact of the cancellation of the Illinois Marathon because of COVID-19 and found that while online engagement helped maintain and build sense of community, online engagement was less effective than in-person interactions. Another study conducted by Thibaut et al. (2021) indicated the value of online engagement because they found that sport participants who used virtual tools were more active during the pandemic and sport participation was positively impacted. The findings suggest that virtual space is a setting for the development of sense of community and can increase all four of McMillan and Chavis' (1986) factors that lead to sense of community by providing opportunities for a community to come together and facilitate a sense of belonging, the ability to be influential, fulfilment of their needs and a shared emotional connection (Lizzo & Liechty, 2020).

COVID-19 Impact on Triathlon

This study focuses on the sport of triathlon, a multisport that encompasses swimming, biking and running. Triathlon is a demanding sport that provides its participants with a positive social identity because of the intense training commitment and the collective support the community gives to each other (Green & Jones 2005;

Horton & Kraftl, 2013). The pandemic had a profound impact on all sports, including triathlon, especially for those who are new to the sport because of the cancellation or postponement of events, restrictions on access to swimming pools (Dietz, 2023). However, there is not consensus in the research because while athletes of many sports decreased training and competing during the pandemic (Mattioli et al., 2020; Mackenzie & Goodnow, 2021), in one study physical activity and sport participation increased with 36% exercising more and 41% exercising as much as before the pandemic (Constandt et al., 2020). Because of the desire for people to exercise during the pandemic, many of the long-term measures of sport health were not impacted. While over 100 Division 1 sport programs were cut because of the pandemic (Garcia-Garcia et al., 2020), collegiate triathlon programs grew by 136% from March of 2020 to September of 2022 (Team USA, 2022). Financially, USA Triathlon recovered within one year. The organization's assets increased by $2.4 million from 2020 to 2021 (USA Triathlon, 2022). Triathlon is a relevant to address the research questions in this study because it is one of the only sports that grew during the pandemic and its participants used virtual technology to train and interact prior to and during the pandemic.

Purpose

The COVID-19 pandemic provided a rare opportunity to explore the impact of sports shutting down on participants. Giles (2020) conveyed the pervasiveness of technology in physical activities and identified key spaces that impact the process of developing sense of belonging for triathletes. Technological advances have played a valuable role in enabling social interactions, extending engagement beyond in-person activities and providing a platform for the triathlon community to express their commitment to each other (Giles, 2020). Giles suggested the importance of conducting research on the

impact of COVID-19 on sense of community for triathletes. Additionally, despite the importance of recently emerging virtual spaces for researchers, their significance to sports participation has not garnered sufficient attention (Lamont & Ross, 2020). The purpose of this study was to examine the impact of COVID-19 on sense of community for triathletes by exploring the role of both virtual and in-person spaces during COVID-19, and the impact of these spaces on the change of sense of community among triathlete participants during the pandemic.

The Research Questions

RQ1: Are there within-subject differences in sense of community in perceptions of pre-COVID and during COVID?

RQ2: Are there within-subject differences in sense of community between participants in the first year of the pandemic and the second year?

RQ3: Are there between-subject differences in sense of community in the first year of the pandemic and the second year of the pandemic?

RQ4: Does the change in sense of community or sport sense of community depend on the extent to which participants report being involved with in-person or virtual activities?

Methods

The primary focus of this study was the impact of social space in a virtual environment on sense of community for triathletes during the pandemic. McMillan and Chavis (1986) developed the Brief Sense of Community Index (BSCI) to understand social connections, community values, needs fulfillment and shared emotional connection. A questionnaire was designed to meet the specific objectives of this research.

Sense of community was evaluated using two scales that were embedded in the larger questionnaire: the Brief Sense of Community Index (BSCI) (Long & Perkins, 2003, McMillan & Chavis, 1986) and the Sense of Community in Sport (SCS) Instrument (Warner, Kerwin & Walker, 2013). In this study, the BSCI was used as a measure of non-context specific sense of community and the SCS instrument was applied to measure sense of community in a sport context with a specific focus on social spaces.

Brief Sense of Community Index (BSCI)

The Sense of Community Index (Perkins et al., 1990) is the most used instrument for empirically measuring the construct introduced to psychology by Sarason (1974) and defined by McMillan and Chavis (1986). Long and Perkins (2003) asserted that the original sense of community index should be adapted because research on sense of community needed brief and validated measures that can be expediently administered in applied community context, in this case sports participants. The BSCI was designed to address method bias and other limitations that made it unreliable in applied community contexts (Peterson, Speer & Hughey, 2006). The scale was developed to assess sense of community utilizing the dimensions of needs fulfillment, group membership, influence, and emotional connection. The BSCI is an 8-item scale combining five original sense of community index items with three other items. These eight items were configured to include a three-factor solution with the following labels: social connections, mutual concerns, and community values. In this study, the BSCI measured sense of community among USA Triathlon members by utilizing a 5-point, Likert-type response option format ranging from strongly agree to strongly disagree. One of the aims of this study was to explore the psychometric properties of the BSCI to explain the meaning of responses

given by subjects (Pasquali, 2009). The BSCI has been criticized for not adhering to the original theoretical framework ([Tarraglia, 2006](#)) until Townley and Kloos (2009) found that the BSCI enhanced psychometric qualities compared to past measurements.

The research consisted of conducting a data analysis on the results from the three questionnaires to determine the changes in sense of community and the relationships between participating in virtual activities and sense of community. In addition, each item was evaluated independently creating a total score for virtual items, a ratio of virtual to in-person participation and a ratio of virtual to all participation. These computed variables lacked sufficient variance/variability to be useful.

TO	T1	T2
	Participant code for matching	Participant code for matching
	Brief Sense of Community (8-items)	Brief Sense of Community (8-items)
Sense of Community (Warner) – including social spaces subscale (retrospective item)	Sense of Community (Warner) – including social spaces subscale	Sense of Community (Warner) – including social spaces subscale
	Participation in virtual activities	Participation in virtual activities
	Demographics	Demographics

Below are the sense of community (SOC) questions derived from the Brief Sense of Community Scale (BSCS), which was published in Peterson, Speer and McMillan (2008) in the context of the triathlon/multisport community.

BSCI Items	Strongly Disagree	Somewhat Disagree	Neutral	Agree	Strongly Agree
I can get what I need in the triathlon/multisport community					
This community helps me fulfill my needs					

I feel like I am a member of this community					
I belong in this community					
I have a say about what goes on in this community					
People in this community are good at influencing each other					
I feel connected to this community					
I have a good bond with others in this community					

Sense of Community in Sport (SCS)

Warner and Dixon (2011) adapted sense of community measures to make it more relevant and applicable to the sports industry that they termed as sense of community in sport (SCS) and developed a seven factors that work in harmony to facilitate sense of community and later, Warner, Kerwin and Walker (2013) developed a six-factor theoretical model for SCS. The survey for this study was developed to measure sense of community and the psychometric properties to explain the meaning of responses given by participants after conducting a comprehensive review of the literature on the six SCS factors: Administrative Consideration (Chiessi et al., 2010; Warner & Dixon, 2011; Warner et al., 2013; Warner et al., 2015), Common Interest (Chavis et al., 2008; Warner & Dixon, 2013; Warner et al., 2013; Warner et al., 2015; Legg et al., 2018), Equity in Administrative Decisions (Warner & Dixon, 2011; Warner & Dixon, 2013; Warner et al., 2013; Warner et al., 2015), Leadership Opportunities (Chavis et al., 2008; Peterson et al., 2008; Warner & Dixon, 2011; Warner & Dixon, 2013; Warner et al., 2013; Warner et al., 2015), Social Spaces (Chiessi et al., 2010; Warner & Dixon, 2011; Warner et al., 2013;

Warner et al., 2015; Legg et al., 2017), and Competition (Kellett & Warner, 2011;

Warner & Dixon, 2011; Warner et al., 2013; Warner et al., 2015).

FACTOR	DESCRIPTION	SAMPLE STATEMENTS
Administrative Consideration	Leadership values me	USA Triathlon leadership made me feel like a valued member; USA Triathlon leadership cares about members
Common Interest	Needs being met, Sense of belonging	This community helps me fulfill my needs; I belong in this community
Equity in Administrative Decisions	Treated fairly	USA Triathlon leadership made decisions that were fair; USA Triathlon leadership considered everyone's needs when making decisions
Leadership Opportunities	Influence	I have a say about what goes on in this community; I had influence over what USA Triathlon looks like
Social Spaces	Ability to interact with others	When I participated in a triathlon/multisport, I knew I had an area where I could interact with others; Virtual spaces create opportunities for me to interact with other triathletes
Competition	Participation in activities	I liked the level of competition in triathlon/multisport events; I participated in virtual races

Procedures

Institutional Review Board approval was received prior to data collection (IRB # 00016392). Three surveys were deployed over the course of 15 months. USA Triathlon emailed the initial questionnaire to 3,000 USA Triathlon members in September 2020 to assess the impact of event postponements and cancellations during COVID-19 on sense of community of triathletes. In addition, the use of virtual spaces during COVID-19 and their relation to overall sense of community was examined. A follow-up questionnaire was distributed in December 2021 to the respondents of the original questionnaire and an

updated version of the original questionnaire was sent to a new list of 3,000 USA Triathlon members (See Appendix E and Appendix F). A few questions were removed from the second survey because some of the pre-COVID-19 questions were no longer relevant.

Data is stored within the USA Triathlon Qualtrics system and deidentified data was provided to the ASU research team when the survey closed and remaining open for approximately two weeks. Only USA Triathlon Data and Analytics Coordinator had access to the data and de-identified the data set before providing it to the ASU research team. USA Triathlon deleted the dataset as soon as the data was provided to the ASU research team. In order to associate potential changes over times, participants were asked a series of questions (month born, number of older brothers, number of older sisters, first initial of mother/female guardian, first initial of father/male guardian, and first initial of middle name).

Findings

The first survey was completed in September 2020 with a sample of 421 respondents and the second survey was issued to this same group in December 2021 and comprised of 187 respondents while the third survey was distributed at the same time and had 418 participants. The demographics of the respondents for the first study were the least affluent with the lowest average household income and the least educated; 67% have a household income of over $100,000, 45.4% have a postgraduate degree or a doctorate degree, 46% are female, 89.9% were white, and the average age is 49.4. The second study had the oldest population with the average age of 52.09 and the most females with 50.36%. Over 50% (51.4%) of the follow up respondents have a

postgraduate degree or a doctorate degree, 80% have a household income of over

$100,000 and 87.5% are white. The third study have the lowest percentage of women

(37%), 49.07% have a postgraduate degree or a doctorate degree, 80% have a household

income of over $100,000, 87.45% are white and the average age is 49.96.

Study	Respondents	Average Age	Female	Race - White	Post Grad or Doc Degree	HH Income Over $100k
T0	421	49.4	46%	89.90%	45.40%	67%
T1	187	52.09	50.36%	87.50%	51.40%	80%
T2	418	49.96	37%	87.45%	49.07%	80%

The results based on the research questions are as follows:

Within-Subject Differences Pre Covid and During Covid					
Pre Covid Mean	Pre Covid SD	During Covid Mean	During Covid SD	SCS t	SCS p<
3.39	0.53	3.28	0.59	-5.3	0.001

Within-Subject Differences Year 1 and Year 2							
Year 1 Mean	Year 1 SD	Year 2 Mean	Year 2 SD	SOC t	SOC p=	SCS t	SCS p=
3.27	0.56	3.32	0.56	-0.6	0.55	0.83	0.408

Between-Subject Differences							
Year 1 Mean	Year 1 SD	Year 2 Mean	Year 2 SD	SOC t	SOC p=	SCS t	SCS p=
3.67	0.7	3.71	0.68	-0.2	0.85	-1.05	0.29

RQ1: To answer this question, a paired-samples t-test was utilized. The results

suggest that there were statistically significant within-subject differences (t (270) = -5.30,

$p < .001$) in sport sense of community (SP) based on perceptions of pre-COVID ($m =$

3.39, $SD = .53$) and during COVID ($m = 3.28$, $SD = .59$). In other words, on average,

116

participants reported that they had more of a sport sense of belonging prior to COVID compared to during COVID.

RQ2: To answer this question, a paired-samples t-test was used. The results suggest that there were not statistically significant within-subject differences in sense of community (SOC; t (87) = -.60, p = .55) or sense of community in sport (SCS); t (83) = .83, p = .408) between T0 (m = 3.27, SD = .56) and T1 (m = 3.32, SD = .56). That is, we did not find evidence suggesting that on average participants' sense of community was different between the two waves of data collection between September 2020 and December 2021.

RQ3: To answer this question, we used an independent-samples t-test. The results suggest that there were not statistically significant between-subject differences in sense of community (SOC; t (561) = -.20, p = .85) or sense of community in sport (SCS; t (540) = -1.05, p = .29) based on data collection wave (T0: m = 3.67, SD = .70; T2: m = 3.71, SD = .68). That is, we did not find evidence suggesting that on average participants' who responded to the survey at T0 reported different levels of sense of community than participants who responded to the survey at T2.

RQ4: Prior to answering this research questions, descriptive statistics for the in-person and virtual activities items were examined. Standard deviation was applied and very little variability was evident in participants' responses across the items. Thus, using items individually or as a composite (in-person and/or virtual, or ratio of in-person to virtual activities) did not yield sufficient variance to allow these variables to serve as useful predictors. As a result of these early findings related to this question, interaction

terms or models were not created, and this original research question was not further explored.

Discussion and Implications

The purpose of this study was to investigate the impact of COVID-19 on sense of community for triathletes by exploring the impact it had on the change of sense of community among triathlete participants across time in a virtual space. One of the communities most impacted by COVID-19 were sport participants with facilities shutting down and stay at home orders in place throughout the first year of the pandemic. The United Nations report on the impact of COVID-19 on sport, physical activity and well-being expressed concern about the lockdown orders because most people do not have the proper workout equipment and access to online training tools making it more difficult to engage in physical activity (Bas et al., 2020). The topline results of this study are that USA Triathlon members adopted alternative virtual engagement opportunities that replaced in-person activities, so they were not materially impacted by the pandemic, because there was not a statistically significant difference in the results.

Triathletes are known to be serious athletes because it takes a significant time and financial commitment to train and compete in the sport. Triathletes stay with the sport for multiple years with over 40% of USA Triathlon annual members have been members for at least three years and triathletes are also project-based participants who compete in mass events with the average USA Triathlon member participating in 3.41 events annually (Team USA, 2016). Triathletes can also be casual athletes who treat triathlon as a bucket-list activity where they participate in one triathlon and then they do not return to the sport with 29% of USA Triathlon's annual members have had their membership for

one year or less (Team USA, 2016). The primary reason most triathletes purchase memberships is to compete in the 4,000 sanctioned events each year across the United States, so there was a big impact on triathletes who train to compete in mass events when thousands of events were canceled in the US in 2020. Finally, Bas et al. (2020) top recommendation was about the importance of sporting federations to create guidance related to safely returning to train and compete, and triathlon was one of the sports allowed to return to hosting events because it is an outdoor sport where there is natural physical distancing, and USA Triathlon created return to racing protocols and communicated them to state and city officials (USA Triathlon, May 7, 2020).

Certain sports, like triathlon, had advantages over other sports during the pandemic. First, triathlon is an individual sport versus a team sport, and team sport participants experienced a more severe impact than individual sport athletes because of the pandemic (Thibaut et al., 2021). Online environments can function as a support mechanism for individuals (O'Connor et al., 2015), tools were found to help people increase sport participation (Ehrlén, 2021) and triathletes are tech savvy (Recipi, 2019) and had already adopted many of the online tools prior to the pandemic that limited disruption in their training because they were able to continue to train in solidarity during the lockdown. Sense of community has been shown to have a positive association with participation and the presence of a collaborative group increases participation of individuals (Cicognani, 2011; Simon, 1998). COVID-19 increased virtual sport participation (Lachance, 2021) and this was evident in triathlon when over 10,000 athletes competed in the world's first virtual triathlon, which was larger than any in-person triathlon in the history of the sport in America. Virtual engagement may be

experienced differently depending on an individual's socioeconomic status, and as the gap between the rich and the poor continues to widen, so does participation (Ustun et al., 2021; Mannarani & Fedi, 2009; Bauman, 2004; Beck, 1998). Triathletes are affluent with an average household income of $134,000 and 81.4% of annual members have at least a four-year degree (USA Triathlon membership report, 2016).Previous research has suggested that technology can contribute to sense of community (Lizzo & Liechty, 2022; Trespalacios & Uribe-Florez, 2020; Shackelford & Maxwell, 2012; O'Hara, 2008; Lear, 2007).As shown in this study, sense of community among triathletes was not impacted by the pandemic because they immediately embraced technology allowing for virtual sense of community to take the place of physical sense of community.

This study analyzed the impact of the virtual environment on sense of community for triathletes during the pandemic. USA Triathlon members were shown to be impacted by the pandemic because they had slightly more of a sport sense of belonging prior to COVID compared to during COVID. Even though their perception of their sense of belonging was higher before COVID compared to during COVID, there was not evidence of within-subject differences or between-subject differences in sense of community when they were surveyed in the first year of the pandemic (September 2020) compared to the second year (December 2021). The results stayed consistent when measuring differences in respondents reporting participating in virtual activities compared to in-person activities, since the respondents did not report different levels of sense of community. Overall, virtual sense of community was shown to stay consistent for triathletes during the pandemic since they were still able to stay in touch with their training partners, coaches and friends, were able to train through emerging technology and were able to

120

compete virtually. Other sports can take some of the learnings from this study and develop virtual engagement opportunities to maintain sense of community for their participants.

The primary limitations of this study are that the results may not be transferable to other sport participants because triathlon is an individual versus team sport, triathletes are tech savvy, and they are affluent. To make this study relevant to other sports, athletes from team sports, athletes in sports that do not utilize technology for training or competitions and lower income participants should be included in future studies. Athletes from individual sports train and compete alone whereas team sport athletes rely on each other to train and compete. This dynamic creates a greater impact for team sport athletes when sports are shut down and participants are unable to continue competing in their sport at the same levels that they did before COVID. Triathletes are early adopters of emerging technology, including wearables, making it easier to participate albeit virtually versus physically (Kastoriano & Halkias, 2020). The respondents were extremely affluent, and the United Nations displayed that low-income families are more vulnerable to the lockdown orders than wealthy families (Bas et al., 2020), so triathletes had a clear advantage to sports with athletes who have less resources. The data cannot be easily generalized, based on the disparities between triathletes and participants of other sports.

Another limitation is the questionnaire construction and the timing of the survey distribution. The questionnaire did not provide the response options necessary for the participation in virtual activities variable. The response options were not asked in a way that naturally leads to composite scores (daily, weekly, monthly, year). Future research should account for this when developing the questions and response options.

Furthermore, it would have been optimal to send a baseline survey out prior to the sport

shutdown in the United States due to the spread of COVID-19.

The research team did not differentiate between athletes who were in states with

more restrictions versus states with less restrictions during the pandemic. If there were

material differences in the initial results, further analysis would have been conducted on a

state-by-state basis to determine how the severity and length of the stay-at-home

restrictions had on sense of community. The study also did not analyze integrating both

virtual and physical training at the same time to see the difference between athletes who

were completely isolated and those who interacted in-person. The next study should look

at how a combination of virtual and physical training impacts sense of community.

The study displayed the importance of diversifying engagement opportunities for

sport participants to include virtual spaces. Sports organizations and technology

companies should leverage existing technology and create new technology to engage and

connect with participants. For a sport like triathlon, this diversification was easier

because many of the technological tools were already in place before the pandemic, such

as wearable devices, bike trainers with computers, and social engagement applications

like Strava. During the pandemic, participants also made significant changes to their

sporting habits due to the cancelation of events and immediately converted to adopted

online offerings, so it is imperative for other sports to identify the virtual engagement

opportunities that are natural training or competition enhancements for participants.

Sense of community in a virtual space should be explored further in a sport

context in the future because it can break through boundaries and barriers that currently

exist with in-person sense of community. Participants can build sport communities across

the world rather than being restricted to the people who live within proximity, and it can allow athletes to connect even when they cannot physically be together. The findings of this study show that participants who utilize virtual technology may maintain their sense of community when separated and unable to participate together. Building a sense of community can make people feel a part of something greater than themselves and provides them with an opportunity to connect with people in their community. Sense of community contributes to a feeling of belonging that has shown to positively impact communities, so every avenue for advancement, whether in person or virtual, should continue to be explored.

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[1] To protect confidentiality, all names used in this manuscript are pseudonyms.

CHAPTER V: DISCUSSION & CONCLUSIONS

This research addresses the need for utilizing sports to generate social capital and sense of community. This dissertation uses a three-study format with each study advancing research leveraging sports to improve the quality of life for community members through the theoretical foundations of social capital, sense of community and social spaces. Each study builds on past research and shows that sports can be leveraged for facilitating social capital and sense of community by studying fans attending in-person events and participants connecting virtually. The first study demonstrates that social capital can be facilitated at college football games and the value of providing access to community members; the second study substantiates that social spaces facilitate sense of community for spectators whether the event is outdoors with limited fixed seating or in an NFL stadium; and the third study shows that the early adoption of virtual spaces allows sense of community for members of a national governing body to not be materially impacted by the pandemic.

Social Capital in Sport

Social capital increases trust among community members (Coleman, 1988; Putnam, 2000). Sports events serve as social anchors that facilitate social interactions leading to the development of social capital, and attending sports events connect people from disparate backgrounds who share the commonality of being fans of the same team (Clopton & Finch, 2011; Oja, et al., 2018). These interactions have the potential to foster social capital by bridging social barriers and bringing groups together to form new networks that can increase access to resources in the community.

The first study, *Ticket Donations as Facilitators of Social Capital*, displays how ticket donations to sports events can facilitate the development of social capital. Using a mixed-method approach, this study's findings indicate: 1) attending sports events facilitates social relationships that can build social capital; 2) donating tickets does not decrease the perceived value of tickets for existing season ticket holders, and may improve their overall experience; and 3) sustained ticket donations to the same people over multiple games that include opportunities for social interaction outside of the game increases the likelihood of developing social capital. Findings from this study demonstrates that access to college football games can increase individual level social capital for attendees.

Findings from this study shows the importance of increasing access to sports events by donating unused tickets because increased interactions can generate social capital. Fans have the opportunity to meet new people, develop long-term relationships and expand their networks. This study shows that relationships often develope across time and are less prevalent in fixed seats and more so in ancillary spaces like tailgating in the parking lots before the game. Further, our findings indicate that new relationships often form from multiple exposures like attending each football game during a season or over multiple seasons. These social interactions bring people together to form new networks and can lead to access to resources in the community. This study findings establish that season ticket holders support donating unused tickets to fill the stadium and improve the game atmosphere, develop new fans, and for community impact, which runs contrary to the approach many sport managers have taken to restrict secondary ticketing options and the donations of tickets (Giovanetti, 2013). Season ticket holders prefer

tickets be donated and do not feel their season ticket value decreases when unused seats are donated to charitable groups, especially to members of the military/veterans, local nonprofits, and children. Fans in this study value improving their game experience by filling the stadium through ticket donations and in meeting people at games that were shown to turn into long-term relationships. Therefore, ticket donations facilitate social capital and can increase the perceived value of paid tickets. This research demonstrates the benefit of donating unused tickets to college football games as an avenue to initiate social relationships that lead to social capital.

Sense of Community in Sport

Social capital and sense of community are different constructs with many similarities including feelings that individuals have of belonging, that they matter to one another, that their needs will be met through their commitment to be together, and that the emotional connection results from sharing similar experiences and common places (Pooley, Cohen, & Pike, 2005; McMillan & Chavis, 1986). Sense of community is a perception that individuals have of belonging and that their needs will be met collectively through shared experiences in common places (McMillan & Chavis, 1986). Warner, Kerwin and Walker (2013) six-factor theoretical model for Sense of Community in Sport (SCS) include social spaces for building sense of community. Social spaces are common areas where fans interact with one another with the potential to foster a sense of community (Warner, Dixon & Chalip, 2012).

The second study, *Fostering a Sense of Community through Social Spaces at Sports Events*, explores how fans use social spaces at sports events to better understand whether social spaces nurture a sense of community. This qualitative research helps

advance the theoretical understanding of social spaces, as contributors of fostering sense

of community for sports fans, which expands on past research focusing primarily on sport

participants. The study demonstrates that attending a sports event in a fixed stadium or in

a public space and interacting in social spaces garners positive feelings about the

community for the attendees and can be contributors to fostering a sense of community.

The enjoyment and pride spectators get from sharing the experience with family, friends,

and other residents, leads to an enhanced sense of community and improves the quality of

life for attendees.

Sport Sense of Community in a Virtual Space

Virtual communities have been studied for over 30 years and limited research has

been conducted on leisure-based virtual communities including sport participants until

recently (Lizzo & Liechty, 2020). Sport is an ideal facilitator of sense of community

because of the commonality that exists between participants and the commitment to each

other and the experiences they share together. According to Witmer et al. (1996) virtual

spaces can simulate real world activities and places. Social spaces extend beyond

traditional physical sport facilities to virtual social spaces. Sport participants were

directly impacted by COVID-19 with facilities shutting down and stay at home orders in

place throughout the first year of the pandemic.

The third study, *Sport Sense of Community in a Virtual Space: COVID-19s

Impact on Sport Participants*, explores the impact of virtual spaces on sense of

community among sport participants during the pandemic. Virtual spaces emerge for

sport participants to connect, train and interact, because most sport facilities during a

pandemic are closed. This study utilized the Brief Sense of Community Index (BSCI) and

136

the Sense of Community in Sport (SCS) instrument to understand the impact a pandemic has on virtual sense of community among endurance sport participants, specifically members of USA Triathlon, the Olympic and Paralympic National Governing Body for the sport in the United States.

Triathlon has advantages over other sports such as being an individual sport where people can train alone, the athletes embrace virtual training and competitions, and they are affluent giving them more flexibility and resources to train utilizing the latest technology. The results of this study show that triathletes were able to adapt to the restrictions and maintain their sense of community and were not material impacted by the pandemic because they immediately embrace technology allowing for virtual sense of community to replace physical sense of community. The findings show that participants who utilize virtual technology may maintain their sense of community when separated and unable to participate together. USA Triathlon members had slightly more of a sport sense of belonging prior to COVID compared to during COVID, so they were minimally impacted by the pandemic because they adopt virtual engagement technology to replace in-person activities.

Practical Application in Sport

The researcher had two objectives: 1. Advance the academic research for sport sociologists, and 2. Provide sport practitioners with insight into the role they play in leveraging sports to build social capital and sense of community. The first study investigated the feasibility of implementing programs to increase access to sports events, such as donating unused tickets to provide access to people who cannot afford to attend on their own. Donating unused tickets increases the opportunity for social capital to be

fostered for underrepresented members of the community and it enhances the game day experience for season ticket holders because this study found a full stadium is preferred. Based on the findings, multiple exposures are important in building social capital, so ticket donations should be given to the same individuals for multiple games and should also incorporate social activities such as tailgating. In the second study, sense of community was enhanced in social spaces provided the opportunity for sense of community to be cultivated. This shows the importance of developing social spaces at sports facilities, since sense of community can originate in social spaces. Sport leaders are encouraged to build social spaces at sports facilities and develop virtual social spaces. Social spaces foster a shared experience and can attract a younger generation to attend because they are more interested in socializing than sitting in fixed seats (Sunnucks, 2019). The sport industry needs to continue to diversify their in-person offerings because fans have become accustomed to spectating in virtual spaces due to the COVID-19 pandemic. Sports organizations and technology companies should leverage existing technology and create new technology to engage and connect with fans and participants. During the pandemic, participants also made significant changes to their sporting habits due to the cancelation of events and immediately converted to adopted online offerings, so it is imperative for sport organizations to create and expand virtual engagement opportunities.

Conclusion

Sport is integrated into all aspects of the American culture, and communities across the country are willing to invest financial resources into supporting sports from youth grassroots sports to professional sports. Politicians and taxpayers are willing to

vote for public subsidies to cover the costs of constructing facilities and there is limited research about how the community benefits from these investments. Examining the social benefit of sports is a relevant area of study because sports facilities can provide opportunities for social interactions to occur that serve as generators of social capital and lead to an enhanced sense of community for spectators and participants. This research studies fans of a team sport in football at both the collegiate and professional level and participants and spectators of an individual sport in triathlon, so the results are transferable to other sport contexts. The findings of all three studies advance the value of sport as a mechanism for building social capital and sense of community.

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148

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APPENDIX A

SEASON TICKET HOLDER QUESTIONNAIRE

1. Thinking about the times you attended Sun Devil home football games what, if anything, would have improved the experience.

2. To what degree do you agree or disagree with the following statement: (Strongly agree to strongly disagree): I enjoy games at Sun Devil Stadium more when the stadium is filled to capacity.
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree

3. To what degree do you agree or disagree with the following statement: (Strongly agree to strongly disagree): Surplus tickets should be made available to members of the community at a discounted rate or complimentary
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree

4. To what degree do you agree or disagree with the following statement: (Strongly agree to strongly disagree): If there are surplus seats on game day they should be left empty/unused.
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree

5. To what degree do you agree or disagree with the following statement: (Strongly agree to strongly disagree): Rather than leave seats empty on game day, surplus seats should be given away free to members of the community?
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree

6. To what degree do you agree or disagree with the following statement: (Strongly agree to strongly disagree): Fans who attend the game should be able to upgrade to your seats if you are not able to attend the game?
   - Strongly Agree
   - Agree
   - Neutral

- Disagree
- Strongly Disagree

7. If surplus seats were made available free or at discounted rates, who do you think should be eligible to receive these tickets? Select all that apply.
- Local nonprofits
- Tempe school children and their parents
- Members of the military
- Lower-income families
- Tempe residents
- Employees of Tempe businesses
- ASU alumni
- Sun Devil Club members (supporters of athletics)
- ASU Faculty/Staff
- Sponsors
- Youth teams
- You and your family as loyal season ticket holder

8. What is your age?

9. What is your gender?
- Female
- Male

10. What is the highest level of education you have completed?
- Grammar school
- High school or equivalent
- Vocational/technical school
- Some college
- Bachelor's degree
- Master's degree
- Professional degree (MD, JD, etc.)
- Doctoral degree

11. What was your total household income during the past 12 months?
- Less than $25,000
- $25,000 to $34,999
- $35,000 to $49,999
- $50,000 to $74,999
- $75,000 to $99,999
- $100,000 to $149,999
- $150,000 or more

12. What is your race/ethnicity?

- African American/Black
- Asian/Pacific Islander
- Hispanic/Latino
- Multiracial
- Native American/American Indian
- White
- Not Listed
- Prefer not to respond

APPENDIX B

SEASON TICKET HOLDER STRUCTURED INTERVIEW

Script to be read to participants before the start of the interview:

Thank you for agreeing to this interview. You were asked to take part in this research study because as a Season Ticket Holder your inputs regarding strategies for utilizing unused tickets for ASU home football games are important to ensure we continue to improve your game day experience. This research is being done to help ASU fully understand the value of the fan experience at home football games. The information you provide today, along with the information you provided last spring in a separate survey, will be extremely helpful as we revise current ASU and Sun Devil Stadium policies and will provide positive change throughout the sports industry as findings from this study are shared in industry reports and academic publications. This interview will last approximately 20-30 minutes. If at any time you wish to reschedule or terminate the interview or determine you do not want your data to be included in analyses that will be used for publication you are free to stop the interview or withdraw the information you provided. Information regarding who you can contact if you have any questions about this study was included in the email we sent to you to confirm this appointment.

Continuing with this interview indicates that you understand your rights and that your responses may be used to inform academic research? Shall I proceed with the survey?

For every football game each year there are empty seats at the Arizona State University's Sun Devil Stadium, because tickets are either not sold or season ticket holders do not attend the game. We would like to get some idea of how our season ticket holders feel about what we should do with the unused seats.

One way to fill up the stadium would be to donate unused tickets to the community.

Knowing that unused football tickets were donated to the community would impact my decision to renew my season tickets.
> 5 = agree
> 4 = somewhat agree
> 3 = neutral: neither agree or disagree
> 2 = somewhat disagree
> 1 = disagree
> 0 = NA

It would depend on who was receiving the ticket donation.
> 5 = agree
> 4 = somewhat agree
> 3 = neutral: neither agree or disagree
> 2 = somewhat disagree
> 1 = disagree
> 0 = NA

I would like to see charity groups receive the donated football tickets.
> 5 = agree

165

4 = somewhat agree
3 = neutral: neither agree or disagree
2 = somewhat disagree
1 = disagree
0 = NA

The specific community groups I would like to see receive these donations are:
(open-ended response)

Why would you like to see tickets donated to the community?
(open-ended question)
NA

Why would you NOT like to see tickets donated to the community?
(open-ended question)
NA

Donating unused tickets to the community will **<u>diminish</u>** the quality of my game day experience.
5 = agree
4 = somewhat agree
3 = neutral: neither agree or disagree
2 = somewhat disagree
1 = disagree
0 = NA

Why?
(opened-ended response)

Donating unused tickets to the community will **<u>enhance</u>** the quality of my game day experience.
5 = agree
4 = somewhat agree
3 = neutral: neither agree or disagree
2 = somewhat disagree
1 = disagree
0 = NA

Why?
(opened-ended response)

What are the most important factors that contribute to the best possible home football game experience?
(opened-ended response)

Tell me about your **<u>most memorable</u>** Sun Devil home football game experience.

Who was the opponent?
What was the weather like?
What was the crowd like?
Why was this the most memorable Sun Devil home game experience for you?
Was the stadium packed?
     Yes (Answer the next question)
     No

Follow up question, assuming they said the stadium was packed –
Would a half empty stadium have changed this experience?
    Yes
    No

What made it your **most memorable** game experience?
    (opened-ended response)

Tell me about your **least memorable** Sun Devil home football game experience?
    Who was the opponent?
    What was the weather like?
    What was the crowd like?
    Why was this the least memorable Sun Devil home game experience for you?
    Was the stadium packed?
      Yes
      No

Follow up question, assuming they said the stadium was not packed –
Would a packed stadium have changed this experience?
    Yes
    No

What made it your **least memorable** game experience?
    (opened-ended response)

Assuming a lesser crowd played a role –
How would a full stadium have changed this experience?
    (opened-ended response)

I would like the unused tickets to be donated to help fill the stadium.
    5 = agree
    4 = somewhat agree
    3 = neutral: neither agree or disagree
    2 = somewhat disagree
    1 = disagree
    0 = NA
Why?

(opened-ended response)

I would **not** like the unused tickets to be donated to help fill the stadium.

     5 = agree

     4 = somewhat agree

     3 = neutral: neither agree or disagree

     2 = somewhat disagree

     1 = disagree

     0 = NA

Why not?

     (opened-ended response)

If you cannot attend a game for some reason, what do you do with your tickets?

     Give them away to a friend or family

     Sell them

     Donate them

     Nothing

     Other: _____

Have you ever donated your unused tickets?

     Yes

          To whom / what organization?

     No

What feeling(s) do you experience when you donate your tickets?

     (open-ended response)

     NA

I would rather sell my football tickets instead of donating them to the community.

     5 = agree

     4 = somewhat agree

     3 = neutral: neither agree or disagree

     2 = somewhat disagree

     1 = disagree

     0 = NA

Why?

     (open-ended response)

Selling my tickets would give me the same satisfaction as donating my tickets.

     5 = agree

     4 = somewhat agree

     3 = neutral: neither agree or disagree

     2 = somewhat disagree

     1 = disagree

0 = NA

Why?
    (open-ended response)

What alternatives would you recommend to help fill the stadium, other than giving seats away?

Follow up question if answered - Would that alternative positively or negatively impact your satisfaction as a season ticket holder?

I know the people who sit near me at ASU games.
    5 = agree
    4 = somewhat agree
    3 = neutral: neither agree or disagree
    2 = somewhat disagree
    1 = disagree
    0 = NA

What relationships have you formed at or surrounding ASU Football games?
    (open-ended response)

What benefits did you receive from that relationship (business, friendship, etc.)? (open-ended response)

APPENDIX C

MAPS

Denver Broncos:

Ironman World Championships:
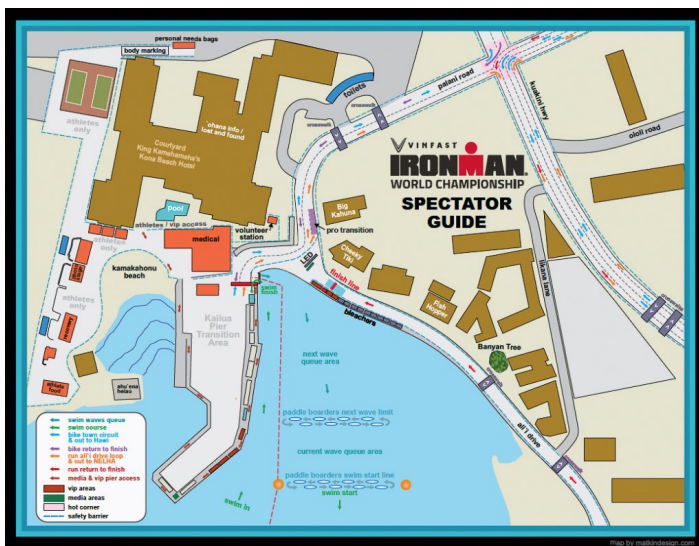
APPENDIX D

SPECTATOR SEMI-STRUCTURED INTERVIEW QUESTIONS

- Question 1: First name?

- Question 2: What is your age?

- Question 3: What is your gender?

  - Male

  - Female

  - Non-Binary

  - Not listed

  - Prefer not to answer

- Question 4: Which of the following best describes your race/ethnicity?

  - White

  - Black or African American

  - American Indian or Alaska Native

  - Asian

  - Hispanic or Latino

  - Native Hawaiian or Pacific Islander

  - Other

- Question 5: What is the highest level of education you have completed?

  - Less than high school

  - High School graduate

  - Technical/two-year degree

  - Some college

  - Four-year degree

  - Some post-graduate work

- o Post-graduate degree

- o Doctorate

- Question 6: What is your household's annual income level?

  - o Less than $10,000

  - o $10,000 - $29,999

  - o $30,000 - $59,999

  - o $60,000 - $99,999

  - o $100,000 - $149,999

  - o $150,000 - $199,999

  - o $200,000 - $249,999

  - o $250,000 - $499,999

  - o $500,000 - $749,999

  - o $750,000 - $999,999

  - o $1M

  - o Prefer not to answer

- Question 7: What's your Zip Code?

- Question 8: How many games have you been to at Mile High? How many times have you been to Kona for the IRONMAN World Championships?

- Question 9: What do you feel about this venue for watching this event?

- Question 10: How does your experience at today's game/event make you feel about this community?

- Question 11: Do you think sporting events fosters a sense of community? Why or why not?

- Question 12: What factors contribute to a sense of community, i.e. places to hang out, cheering for the team/athletes, etc.?

- Question 13: Can you give me an example of when you felt a strong sense of belonging at a sporting event?

- Question 14: Do you feel like you belong here? Why or why not?

- Question 15: Would you recommend attending this event to other people?

Social Spaces (Adapted from the SCS Measures in Warner, Kerwin, & Walker, 2012, pg. 354). Yes/No, Why or Why not?

- Question 16: When going to an event here, there are places where I can interact with other fans. Yes/No, Why or why not?

- Question 17: These events <u>provide</u> me a place to interact with other fans. Yes/No. Why or why not?

APPENDIX E

SOC DURING COVID QUESTIONNAIRE

USA Triathlon is partnering with Arizona State University to assess how your sense of community with the multi-sport community has been impacted by COVID-19. We are inviting your participation, which will involve an online questionnaire. The questionnaire will take approximately 8 minutes to complete. You have the right not to answer any question, and to stop participation at any time. You must be 18 years of age or older to participate. Your participation in this study is voluntary, and your responses will be anonymous. If you have any questions concerning the research study, please contact the ASU research team at: Eric Legg at eric.legg@asu.edu. If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at (480) 965-6788. By continuing this questionnaire you are agreeing to be part of the study.

Q1 Thank you for your participation. Please answer each question as honestly as you can. The first few questions will be used to provide you with a code so that we can match your answers now to a potential future questionnaire - without you having to put your name down.

Q2 Month of your birthday:

▼ January (1) ... December (12)

Q3 Number of Older Brothers (if none write X):

_____

Q4 Number of Older Sisters (if none write X):

_____

Q5 First initial of Mother/Female Guardian's First Name:

_____

Q6 First initial of Father/Male Guardian's First Name:

_____

Q7 First initial of your middle name (if none, write X):

_____

Q8 How many total years have you been an annual member of USA Triathlon?

0   4   7   11   14   18   21   25   28   32   35

Number of years ()	———————————▮———————————

Q9 What is your age?

                    0 10 20 30 40 50 60 70 80 90 100

Age ()	———————————▮———————————

Q10 What is your gender?

○ Male (1)

○ Female (2)

○ Not listed (3) _____

○ Prefer not to answer (4)

Q11 Which of the following best describes your race/ethnicity?

○ White (11)

○ Black or African American (12)

○ American Indian or Alaska Native (13)

○ Asian (14)

○ Hispanic or Latino (17)

○ Native Hawaiian or Pacific Islander (15)

○ Other (16)

Q12 What is the highest level of education you have completed?

○ Less than high school (1)

○ High School graduate (2)

○ Technical/two-year degree (3)

○ Some college (4)

○ Four-year degree (5)

○ Some post-graduate work (6)

○ Post-graduate degree (7)

○ Doctorate (8)

Q13 What is your household's annual income level?

○ Less than $10,000 (1)

○ $10,000 - $29,999 (2)

○ $30,000 - $59,999 (3)

○ $60,000 - $99,999 (4)

○ $100,000 - $149,999 (5)

○ $150,000 - $199,999 (6)

○ $200,000 - $249,999 (7)

○ $250,000 - $499,999 (8)

○ $500,000 - $749,999 (9)

○ $750,000 - $999,999 (10)

○ $1M + (11)

○ Prefer not to answer (12)

Q14 In the following question, the word community refers to the **community of people you interact with as a result of your participation in the multisport community.**

Q15 Please rate your agreement with the following statements on a scale ranging from strongly agree to strongly disagree.

	Strongly disagree (8)	Somewhat disagree (9)	Neutral (10)	Agree (11)	Strongly agree (12)
I can get what I need in the triathlon/multisport community. (1)	○	○	○	○	○
This community helps me fulfill my needs (2)	○	○	○	○	○
I feel like I am a member of this community (3)	○	○	○	○	○
I belong in this community (4)	○	○	○	○	○
I have a say about what goes on in this community (5)	○	○	○	○	○
People in this community are good at influencing each other (6)	○	○	○	○	○
I feel connected to this community (8)	○	○	○	○	○
I have a good bond with others in this community (9)	○	○	○	○	○

Q16 Please rate your agreement with the following statements on a scale ranging from strongly agree to strongly disagree. For each item, please rate how you felt _**prior to the onset of COVID-19**_

	Strongly disagree (1)	Somewhat disagree (3)	Neutral (4)	Agree (5)	Strongly agree (6)
USA Triathlon leadership cared about members (1)	○	○	○	○	○
USA Triathlon leadership supported members (2)	○	○	○	○	○
I felt comfortable talking with USA Triathlon leadership (3)	○	○	○	○	○
USA Triathlon leadership made me feel like a valued member (4)	○	○	○	○	○
I shared similar values with other triathletes/multisport athletes (5)	○	○	○	○	○
I feel like I belonged with other triathletes/multisport athletes (6)	○	○	○	○	○
Participating in the triathlon/multisport community provided me with friends who shared a strong commitment to triathlon/multisport (7)	○	○	○	○	○
USA Triathlon leadership made decisions that benefit everyone (8)	○	○	○	○	○

USA Triathlon leadership made decisions that were fair (9)	○	○	○	○	○
USA Triathlon leadership considered everyone's needs when making decisions (10)	○	○	○	○	○
I had influence over what USA Triathlon looks like (11)	○	○	○	○	○
If there was a problem in USA Triathlon, I could help solve it (12)	○	○	○	○	○
I had a say over what goes on in USA Triathlon (13)	○	○	○	○	○
Being a member of USA Triathlon gave me an opportunity to lead (14)	○	○	○	○	○
I felt a bond with other triathletes/multisport athletes when competing against them (15)	○	○	○	○	○
I liked the level of competition in triathlon/multisport events (16)	○	○	○	○	○

Q16 Please rate your agreement with the following statements on a scale ranging from strongly agree to strongly disagree. For each item, please rate how you feel *today.*

	Strongly disagree (1)	Somewhat disagree (3)	Neutral (4)	Agree (5)	Strongly agree (6)
USA Triathlon leadership cares about members (1)	○	○	○	○	○
USA Triathlon leadership supports members (2)	○	○	○	○	○
I feel comfortable talking with USA Triathlon leadership (3)	○	○	○	○	○
USA Triathlon leadership makes me feel like a valued member (4)	○	○	○	○	○
I share similar values with other triathletes/multisport athletes (5)	○	○	○	○	○
I feel like I belong with other triathletes/multisport athletes (6)	○	○	○	○	○
Participating in the triathlon/multisport community provides me with friends who share a strong commitment to triathlon/multisport (7)	○	○	○	○	○
USA Triathlon leadership makes decisions that benefit everyone (8)	○	○	○	○	○
USA Triathlon leadership makes decisions that are fair (9)	○	○	○	○	○

USA Triathlon leadership considers everyone's needs when making decisions (10)	○	○	○	○	○
I have influence over what USA Triathlon looks like (11)	○	○	○	○	○
If there is a problem in USA Triathlon, I can help solve it (12)	○	○	○	○	○
I have a say over what goes on in USA Triathlon (13)	○	○	○	○	○
Being a member of USA Triathlon gives me an opportunity to lead (14)	○	○	○	○	○
I feel a bond with other triathletes/multisport athletes when competing against them (15)	○	○	○	○	○
I like the level of competition in triathlon/multisport events (16)	○	○	○	○	○

Page Break

184

Q17 The following questions ask about your participation in triathlon/multisport activities ***prior to COVID-19.***

	Strongly disagree (8)	Disagree (9)	Neutral (10)	Agree (11)	Strongly Agree (12)
When participating in a triathlon/multisport, there were places I could interact with others (1)	○	○	○	○	○
When I participated in a triathlon/multisport, I knew I had an area where I could interact with others (2)	○	○	○	○	○
Triathlon/Multisport events created a place for me to interact with others (3)	○	○	○	○	○
USA Triathlon leaders made me feel like a valued member (4)	○	○	○	○	○

End of Block: Block 1

Start of Block: Block 2

Q18 The following questions ask about your participation in triathlons/multisport events and virtual spaces ***during COVID-19.***

Q19 The following questions ask about your participation in multisport *today.*

	Strongly disagree (8)	Disagree (9)	Neutral (10)	Agree (11)	Strongly agree (12)
There are virtual places (e.g. online, Zoom, Zwift, Slowtwitch) where I can interact with other triathletes/multsiport athletes (1)	○	○	○	○	○
I know I still have places (virtual or in-person) where I can interact with other triathletes (2)	○	○	○	○	○
Virtual spaces create opportunities for me to interact with other triathletes (3)	○	○	○	○	○
USA Triathlon leaders make me feel like a valued member (4)	○	○	○	○	○

Q20 The following questions ask about whether you participate in the following activities more or less pre-COVID-19 compared to today.   How frequently did you participate in the following

	Daily (1)	A few times per week (3)	A few times per month (4)	A few times per year (5)	Never (6)
I interacted online with the triathlon/multisport community (e.g. Slowtwitch, social media platforms) (1)	○	○	○	○	○
I used virtual training platforms (e.g. Zwift, Peloton) (2)	○	○	○	○	○
I communicated with members of the triathlon/multisport community (3)	○	○	○	○	○
I attended virtual endurance conferences or seminars (4)	○	○	○	○	○
I watched and used online training/workout videos (5)	○	○	○	○	○
I worked out (swim/bike/run) alone (6)	○	○	○	○	○
I worked out (swim/bike/run) with friends (7)	○	○	○	○	○
I worked out (swim/bike/run) with family (8)	○	○	○	○	○
I attended in-person social meet-ups with a group of triathletes/multisport athletes (9)	○	○	○	○	○

I attended in-person training sessions with a group of triathletes/multisport athletes (10)	○	○	○	○	○
I attended virtual social meet-ups with a group of triathletes/multisport athletes (11)	○	○	○	○	○
I participated in in-person races (12)	○	○	○	○	○
I participated in virtual races (13)	○	○	○	○	○
I felt closely connected to the sport (14)	○	○	○	○	○

Q21 How frequently do you participate in the following activities ***currently?***

	Daily (1)	A few times per week (3)	A few times per month (4)	A few times per year (5)	Never (6)
I interact online with the triathlon/multisport community (e.g. Slowtwitch, social media platforms) (1)	○	○	○	○	○
I use virtual training platforms (e.g. Zwift, Peloton) (2)	○	○	○	○	○
I communicate with members of the triathlon/multisport community (3)	○	○	○	○	○
I attend virtual endurance conferences or seminars (4)	○	○	○	○	○
I watch and use online training/workout videos (5)	○	○	○	○	○
I workout (swim/bike/run) alone (6)	○	○	○	○	○
I workout (swim/bike/run) with friends (7)	○	○	○	○	○
I workout (swim/bike/run) with family (8)	○	○	○	○	○
I attend in-person social meet-ups with a group of triathletes/multisport athletes (9)	○	○	○	○	○

I attend in-person training sessions with a group of triathletes/multisport athletes (10)	○	○	○	○	○
I attend virtual social meet-ups with a group of triathletes/multisport athletes (11)	○	○	○	○	○
I participate in in-person races (12)	○	○	○	○	○
I participate in virtual races (13)	○	○	○	○	○

APPENDIX F

SOC AFTER COVID QUESTIONNAIRE

USA Triathlon is partnering with Arizona to a questionnaire you completed last year. We are inviting your participation, which will USA involve an online questionnaire. The questionnaire will take approximately 5 minutes to complete. You have the right not to answer any question, and to stop participation at any time. You must be 18 years of age or older to participate. Your participation in this study is voluntary, and your responses will be anonymous. If you have any questions this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at (480) 965-6788. By continuing this questionnaire, you are agreeing to be part of the study. If you have any questions about your rights as a subject/participant in concerning the research study, please contact the ASU research team at: Eric Legg at eric.legg@asu.edu.

Q1 Thank you for your participation. Please answer each question as honestly as you can. The first few questions will be used to provide you with a code so that we can match your answers now to previous or a potential future questionnaire - without you having to put your name down.

Q2 Month of your birthday:

▼ January (1) ... December (12)

Q3 Number of Older Brothers (if none write X):

_____

Q4 Number of Older Sisters (if none write X):

_____

Q5 First initial of Mother/Female Guardian's First Name:

_____

Q6 First initial of Father/Male Guardian's First Name:

_____

Q7 First initial of your middle name (if none, write X):

_____

Q8 In the following question, the word community refers to the **community of people you interact with as a result of your participation in the multisport community.**

Q9 Please rate your agreement with the following statements on a scale ranging from strongly agree to strongly disagree.

	Strongly disagree (8)	Somewhat disagree (9)	Neutral (10)	Agree (11)	Strongly agree (12)
I can get what I need in the triathlon/multisport community. (1)	○	○	○	○	○
This community helps me fulfill my needs (2)	○	○	○	○	○
I feel like I am a member of this community (3)	○	○	○	○	○
I belong in this community (4)	○	○	○	○	○
I have a say about what goes on in this community (5)	○	○	○	○	○
People in this community are good at influencing each other (6)	○	○	○	○	○
I feel connected to this community (8)	○	○	○	○	○
I have a good bond with others in this community (9)	○	○	○	○	○

Q10 The following questions ask about your participation in multisport *today.*

	Strongly disagree (8)	Disagree (9)	Neutral (10)	Agree (11)	Strongly agree (12)
There are virtual places (e.g. online, Zoom, Zwift, Slowtwitch) where I can interact with other triathletes/multsiport athletes (1)	○	○	○	○	○
I know I still have places (virtual or in-person) where I can interact with other triathletes (2)	○	○	○	○	○
Virtual spaces create opportunities for me to interact with other triathletes (3)	○	○	○	○	○
USA Triathlon leaders make me feel like a valued member (4)	○	○	○	○	○

Q11 Please rate your agreement with the following statements on a scale ranging from strongly agree to strongly disagree. For each item, please rate how you feel *today.*

	Strongly disagree (1)	Somewhat disagree (3)	Neutral (4)	Agree (5)	Strongly agree (6)
USA Triathlon leadership cares about members (1)	○	○	○	○	○
USA Triathlon leadership supports members (2)	○	○	○	○	○
I feel comfortable talking with USA Triathlon leadership (3)	○	○	○	○	○
USA Triathlon leadership makes me feel like a valued member (4)	○	○	○	○	○
I share similar values with other triathletes/multisport athletes (5)	○	○	○	○	○
I feel like I belong with other triathletes/multisport athletes (6)	○	○	○	○	○
Participating in the triathlon/multisport community provides me with friends who share a strong commitment to triathlon/multisport (7)	○	○	○	○	○
USA Triathlon leadership makes decisions that benefit everyone (8)	○	○	○	○	○
USA Triathlon leadership makes decisions that are fair (9)	○	○	○	○	○

USA Triathlon leadership considers everyone's needs when making decisions (10)	○	○	○	○	○
I have influence over what USA Triathlon looks like (11)	○	○	○	○	○
If there is a problem in USA Triathlon, I can help solve it (12)	○	○	○	○	○
I have a say over what goes on in USA Triathlon (13)	○	○	○	○	○
Being a member of USA Triathlon gives me an opportunity to lead (14)	○	○	○	○	○
I feel a bond with other triathletes/multisport athletes when competing against them (15)	○	○	○	○	○
I like the level of competition in triathlon/multisport events (16)	○	○	○	○	○

Q12 How frequently do you participate in the following activities *currently?*

	Daily (1)	A few times per week (3)	A few times per month (4)	A few times per year (5)	Never (6)
I interact online with the triathlon/multisport community (e.g. Slowtwitch, social media platforms) (1)	○	○	○	○	○
I use virtual training platforms (e.g. Zwift, Peloton) (2)	○	○	○	○	○
I communicate with members of the triathlon/multisport community (3)	○	○	○	○	○
I attend virtual endurance conferences or seminars (4)	○	○	○	○	○
I watch and use online training/workout videos (5)	○	○	○	○	○
I workout (swim/bike/run) alone (6)	○	○	○	○	○
I workout (swim/bike/run) with friends (7)	○	○	○	○	○
I workout (swim/bike/run) with family (8)	○	○	○	○	○
I attend in-person social meet-ups with a group of triathletes/multisport athletes (9)	○	○	○	○	○

I attend in-person training sessions with a group of triathletes/multisport athletes (10)	○	○	○	○	○
I attend virtual social meet-ups with a group of triathletes/multisport athletes (11)	○	○	○	○	○
I participate in in-person races (12)	○	○	○	○	○
I participate in virtual races (13)	○	○	○	○	○

- -

Q13 What is your gender?

○ Male (1)

○ Female (2)

○ Non-Binary (5)

○ Not listed (3) _____

○ Prefer not to answer (4)

- -

Q14 What is your age?

0   10   20   30   40   50   60   70   80   90   100

Age ()

Q15 Which of the following best describes your race/ethnicity?

○ White (11)

○ Black or African American (12)

○ American Indian or Alaska Native (13)

○ Asian (14)

○ Hispanic or Latino (17)

○ Native Hawaiian or Pacific Islander (15)

○ Other (16)

Q16 What is the highest level of education you have completed?

○ Less than high school (1)

○ High School graduate (2)

○ Technical/two-year degree (3)

○ Some college (4)

○ Four-year degree (5)

○ Some post-graduate work (6)

○ Post-graduate degree (7)

○ Doctorate (8)

Q17 What is your household's annual income level?

○ Less than $10,000 (1)

○ $10,000 - $29,999 (2)

○ $30,000 - $59,999 (3)

○ $60,000 - $99,999 (4)

○ $100,000 - $149,999 (5)

○ $150,000 - $199,999 (6)

○ $200,000 - $249,999 (7)

○ $250,000 - $499,999 (8)

○ $500,000 - $749,999 (9)

○ $750,000 - $999,999 (10)

○ $1M + (11)

○ Prefer not to answer (12)

Q18 How many total years have you been an annual member of USA Triathlon?

	0	4	7	11	14	18	21	25	28	32	35
Number of years ()											

APPENDIX G

IRB APPROVAL STUDY 1

ASU Knowledge Enterprise Development

EXEMPTION GRANTED

Elisa Bienenstock
Public Service and Community Solutions, College of (PUBSRV)
602/496-0927
ejb01@asu.edu

Dear Elisa Bienenstock:

On 9/19/2016 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	Season Ticket Holder Sentiments on Uses of Unused Seats
Investigator:	Elisa Bienenstock
IRB ID:	STUDY00004836
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	• Spring 2016 Survey Summary.pdf, Category: Other (to reflect anything not captured above); • Ticket Holder IRB Protocol.docx, Category: IRB Protocol; • Spring 2016 old Questionnaire.pdf, Category: Other (to reflect anything not captured above); • Season Ticket Holder Questionnaire.pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • Ticket Holder Recruitment.pdf, Category: Recruitment Materials; • HRP-502a - Tickets CONSENT SOCIAL BEHAVIORAL.pdf, Category: Consent Form;

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2) Tests, surveys, interviews, or observation on 9/19/2016.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Sincerely,

IRB Administrator

cc:
      Brett Harris
      Elisa Bienenstock
      Scott Crane

APPENDIX H

IRB APPROVAL STUDY 2

EXEMPTION GRANTED

Walter Legg
WATTS: Community Resources and Development, School of
602/496-1057
Eric.Legg@asu.edu

Dear Walter Legg:

On 8/31/2022 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	FOSTER A SENSE OF COMMUNITY THROUGH SOCIAL SPACES AT SPORTING EVENTS
Investigator:	Walter Legg
IRB ID:	STUDY00016392
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	• Interview Questions, Category: Other; • IRB Social Behavioral , Category: IRB Protocol; • v2_ Consent.pdf, Category: Consent Form;

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2)(i) Tests, surveys, interviews, or observation (non-identifiable), (2)(ii) Tests, surveys, interviews, or observation (low risk) on 8/31/2022.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

If any changes are made to the study, the IRB must be notified at research.integrity@asu.edu to determine if additional reviews/approvals are required. Changes may include but not limited to revisions to data collection, survey and/or interview questions, and vulnerable populations, etc.

REMINDER - - Effective January 12, 2022, in-person interactions with human subjects require adherence to all current policies for ASU faculty, staff, students and visitors. Up-to-date information regarding ASU's COVID-19 Management Strategy can be found here. IRB approval is related to the research activity involving human subjects, all other protocols related to COVID-19 management including face coverings, health checks, facility access, etc. are governed by current ASU policy.

Sincerely,

IRB Administrator

cc: Brett Harris

APPENDIX I

IRB APPROVAL STUDY 3

EXEMPTION GRANTED

Walter Legg
WATTS: Community Resources and Development, School of
602/496-1057
Eric.Legg@asu.edu

Dear Walter Legg:

On 8/10/2020 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	Sense of Community in Sport: Covid-19's Impact on Social Spaces
Investigator:	Walter Legg
IRB ID:	STUDY00012231
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	• Questionnaire , Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • Sense of Community in Sport: Covid-19's Impact on Social Spaces , Category: IRB Protocol; • USA Tri Statement of Support.pdf, Category: Off-site authorizations (school permission, other IRB approvals, Tribal permission etc); • v1_COVID and SOC Consent.pdf, Category: Consent Form;

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 on 8/10/2020.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

If any changes are made to the study, the IRB must be notified at research.integrity@asu.edu to determine if additional reviews/approvals are required. Changes may include but not limited to revisions to data collection, survey and/or interview questions, and vulnerable populations, etc.

Sincerely,

IRB Administrator

cc: Brett Harris
        Brett Harris